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THE COMPLETE
OGRAPHIC CLASS-BOOK,

CONTAINING A

RICTLY INDUCTIVE EXPOSITION

OF

PITMAN'S PHONOGRAPHY,

A SYSTEM OF PHONETIC SHORT HAND, TO THE ENGLISH LANGUAGE;
ALY INTENDED AS A SCHOOL BOOK, AND TO AFFORD THE
FULLEST INSTRUCTION TO THOSE WHO HAVE NOT THE
ASSISTANCE OF THE LIVING TEACHER.

BY

S. P. ANDREWS,

AND

AUGUSTUS F. BOYLE.

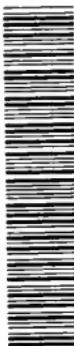
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PITMAN'S PHONOGRAPHY,

ADAPTED AS A SYSTEM OF PHONETIC SHORT HAND, TO THE ENGLISH LANGUAGE;
ESPECIALLY INTENDED AS A SCHOOL BOOK, AND TO AFFORD THE
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S. P. ANDREWS,

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AUGUSTUS F. BOYLE.

Second Edition.

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P R E F A C E.

THE Writing and Printing Reformation naturally divides itself into several branches, of which Phonography is, perhaps, the most *obviously* important. The invention of a system of writing, combining *more than the rapidity of stenography, with more than the legibility of long hand*, while it is, at the same time, extremely simple and easy of acquisition, is at once admitted to be an immense benefit conferred upon the world.

Phonography needs only to be known, to captivate the lover of truth and harmony, as exhibited in nature, and the admirer of human ingenuity, while it interests equally the mere practical economist. Combining both a science and an art, it enchants the philosophic mind by the beauty and simplicity of its principles, while the *luxury* of being able, after a moderate amount of practice, to drop one's thoughts upon paper with the rapidity of speech, and with the clearness of unerring certainty to the eye, excites a degree of enthusiasm among all those who become familiar with Phonography, which has rarely, if ever, attached to any mere matter of science, and which may even seem like folly to the uninitiated.

The incidental advantages of Phonography, are, likewise, hardly capable of being over-estimated, especially as it relates to music, elocution, and the correct pronunciation of our own and of foreign languages. It seems inevitably destined to a most

rapid and successful career, until it shall, at no distant day, entirely supersede our present method of writing, in the general business of life.

Desirous of aiding its progress, and especially of inducing its speedy introduction into all our schools and academies, as a regular branch of instruction, we have bestowed great care upon the preparation of 'The Complete Phonographic Class-Book,' which, it is hoped, will be found at least free from any serious defect as a school-book, while it will, at the same time, enable adults of ordinary capacity to acquire the art, even without the aid of oral instruction.

The works of Mr. Pitman exhibit great carefulness of detail, and the most admirable skill and indefatigable perseverance in perfecting the art, while we think them susceptible of material improvement, as *School Books*, in respect to method and arrangement, upon which he has, doubtless, not been able to bestow an equal amount of time and reflection. While, therefore, we have carefully avoided attempting changes which should affect a system that seems so perfect as hardly to admit the possibility of improvement, the *plan* of the present work is entirely new, and it will, we venture to hope, be found more inductive, lucid, and complete, than any previous publication upon the subject.

Phonography, on account of its precise representation of the sounds of words, has been aptly denominated '*doing the truth.*' With an ardent wish for the prevalence of this habit, in writing, as in all other things, and for the speedy triumph of phonography over our present false and barbarous orthography and cumbersome hand-writing, we submit this work to the public, remarking, in conclusion, that phonography, and its sister art, phonotypy, (4) are eminently *the arts for the people*, and that they are acquired even more readily by the unlearned than by the highly educated, inasmuch as they have less of false teaching to unlearn.

INTRODUCTION.

1. SPEECH is the principal means by which we convey a knowledge of our own thoughts and feelings to the minds of others. It is understood through the medium of the ear, and had its origin, doubtless, in the infancy of the human race. The use of written signs, or letters, is an invention of more recent times for accomplishing the same purpose through the medium of the eye.

There are two methods of employing written signs. In the first place, they may be used directly as the representatives of ideas, just as we make the picture of a horse to signify a horse. In this manner, each character stands for an idea, such as is represented by a word when we speak ; but with the difference above stated, that the representation is made to the eye, and not to the ear.

In this method of writing, therefore, the picture or sign used, does not, in any manner, denote the sounds which are made with the mouth, in speaking the word. The sign may be understood even by people of another nation who do not understand the spoken word at all. Still there are numerous difficulties in this method of communicating thought. We can easily represent *a horse* or *a house*, but how shall we represent *good, bad, sweet, sour*? The people that write by pictures in

this manner are obliged to make a representation of some *thing* that is *good, bad, sweet, or sour*, instead of making a picture of the *quality*—which cannot be done. But there are so many things which have these qualities, that this method of writing is altogether indefinite; besides which, the object that they may choose to paint for *good*, will have, at the same time, *other* qualities which may be mistaken for the one intended. Hence, writing of this kind becomes quite arbitrary, and, from the great number of characters which must be employed, it is extremely burdensome, either to be learned or practised.

2. These difficulties have led most of the nations of the earth to adopt a different mode of communicating their ideas by signs. Instead of using a *picture* as a direct representative of *an idea*, they have analysed the *spoken word*, by which the same idea is *represented*, into its *component parts* or *sounds*, and have given to *each* of these parts, or elementary sounds, a *separate sign*. These signs *combined*, make what we call a *written word*; which is properly a sign of the *spoken word*, or utterance of voice, and, in a *secondary* manner only, the representative of *an idea*.

This latter method of writing, though not so simple and natural as the former, is nevertheless much more convenient, because, although our ideas are so very numerous, the sounds of the voice which are heard in all the words we speak, are found, when analysed into their simple elements, to be very few; so that a very small number of signs enable us to write all the words of a language, however numerous they may be.

The former method of writing was used by the Egyptians, and other ancient people, and is used at the present day by the Chinese. It is called *hieroglyphic* or *symbolic*, and sometimes *ideologic*, because it represents *ideas* directly; and the latter method, which is used by most other nations of the

world, is called *phonetic*,—from the Greek word *phone*, *the voice*, because it represents the sounds of the voice.

3. The old method of spelling and writing words, is, therefore, *based* upon the phonetic principle, and *should* represent the sounds of the voice in speaking. But this is far from being the case ; from various causes, such as the foreign origin of our alphabet, changes which have occurred in the course of time in the pronunciation of many words, and the adoption of new words from other languages, without adapting them to any standard of orthography, it has deviated very much from the true representation of sounds, until it has become at length quite as difficult to be learned as the hieroglyphic system. Thus, for example, we now write the word *though* with six letters, each of which should represent a sound, or else not be written. Yet there are, in fact, only *two* sounds heard in the word. The first is made by placing the tip of the tongue just between the teeth, and breathing outward. This sound is represented by two letters, a *t* and an *h*, for the want of any single letter in the alphabet to denote the sound. The second is the sound which ought to be represented by the letter *o* alone, but a *u*, a *g*, and an *h*, are added to it, without any necessity, so far as the sound of the word is concerned. So in the word *sleigh*, which we write with six letters, although there are but three sounds in the word, the first of which is the hissing sound represented by *s*, the second the liquid sound represented by *l*, and the third the vowel sound of *a* in *mate*, for which no less than four letters *e*, *i*, *g*, and *h* are written, no one of them having the slightest resemblance in sound to that of the letter *a*.

4. Phonography, from the Greek *PHONE*, *sound*, or *voice*, and *GRAPHEIN*, *to write*, signifies merely the *writing of sounds*, or writing according to sound. It follows that the term *phonography* is properly applicable to any system of writing which correctly represents the sounds of words, whether it be

long hand or short hand. Short hand phonography is, however, generally understood by the term when used alone ; but there is likewise a system of long hand phonography, which, when it is spoken of, should be distinguished from the other by the addition of the word *longhand*.

Printing, in a correct orthography, corresponding with that used in phonography, is denominated *phonótypy* from PHONE, *the voice*, and TYPOS, a *type*. Any *written letter*, or *mark*, standing for a certain sound, is called a *phonograph*. A *printed letter*, or *sign*, used for the same purpose, is called a *phonotype*. The letters of our old alphabet are frequently not phonographs and phonotypes, as they represent no sound at all in those situations in which they are called *silent letters* ; and they are not at any time *accurate* phonographs and phonotypes, as they are equally used to represent several different sounds : as *e*, *a*, *o*, &c., each of which shifts its sound four or five times in the different words in which it occurs.

The old irregular method of writing and printing words, as they have hitherto been spelled, is denominated, for the sake of distinction, *heterógraphy*, and *heterótypy*, from HETEROS, *other*, as differing from the phonetic mode ; and to denote their falsity.

The science of sound, upon which phonography is based, is called *phonetics*.

5. A system of writing, to be perfect, should have one uniform method of representing every sound of the voice that is uttered in speaking, and which is obviously distinct. In the next place, it is desirable for practical purposes to obtain the greatest possible brevity, and, therefore, the characters or letters by which these sounds are represented, should be the simplest in their forms that can be found, and, in the third place, in order to facilitate the learning and use of them, they ought to be selected and arranged in strict correspondence with the nature and order of the sounds which they represent ;

thus, sounds which are related to each other by a similitude of organic formation, should be represented by signs having in their forms a corresponding resemblance. In other words, the best system of writing will be I. true, II. brief, and III. analogical. These properties are admirably combined in the system of phonetic short-hand — the production of the genius and labors of Mr. Pitman.

6. The elements of speech, or the elementary sounds of the voice are properly divided into vowels and consonants. The *sounds* represented by these terms must be carefully distinguished, in the first place, from the written *signs* by which they are represented (which may be called *vowel-signs*, and *consonant-signs*, *characters*, or *letters*), and, in the second place, from the *names* that have been given to these signs. For example, in *heterography*, the vowel which is heard in *fate* has the *sound* of the word *aye*; the written *sign*, or *vowel-sign*, has the figure or shape *a*, and the *name* of the letter is the same as the *sound*. But in the word *far* we see the same *vowel-sign*, and we call it by the same *name* as before, but we now hear the *sound* of the word *ah*, which is entirely different from the *name*. In the word *many*, the same *sign* represents the abrupt *sound* of the interjection *eh!* and in *mortar* it represents a *sound* very similar to that of the word *err* when it is imperfectly pronounced. In *call*, the same *sign*, with the same *name*, gives to the ear the *sound* of the word *awe*. So, again, in this word *call*, we have the *consonant-sign*, having the form *c*, which we *name* like the word *see* or *sea*, but which *sounds* like *k* in *kill*; that is, it represents the short, hard, cracking sound which we make nearly back to the throat when we begin to say *kill*, and which may be heard by itself, if we stop suddenly before pronouncing the vowel. But this same *letter*, with the same *name*, is used in other words, as in *cellar*, where the *sound* which we hear is a simple *hiss* made between the tongue and the teeth, and very similar to

that made by a serpent or a goose; and this *hissing sound* is again represented by another letter, as in the word *seat*, with the form *s*, and a *name* like the first syllable of the word *essence*. This terrible confusion runs through our whole language in the old orthography. It presents the most serious difficulties in acquiring the arts of reading and writing, wasting one entire third of the time devoted to education, unsuits us for learning the pronunciation of foreign languages, and, in various ways, exerts the most deleterious influence upon our habits of thought through life.

7. It is, therefore, of the utmost importance that a pupil should break up the habit of regarding a *sound* as identical with the *name of a letter*, and that he should understand that, when we speak of vowels and consonants, we mean *sounds of the voice*, as heard by the ear, without any reference to the *characters* by which they may be represented, or the *names* that may be given to such characters. No progress can be made in phonography until this is done.

8. *A vowel* may then be defined, to be *the smooth or harmonious emission of sounding breath*; as *e*, *a*, *ah*, **MODULATED but not OBSTRUCTED by the organs of speech.** (44.)

9. *A consonant* is *a sound made either by a complete or partial contact of the organs of speech obstructing the sounding breath, in some degree varying from an entire BREAK or STOPPAGE of it, as p in rap, b in rob, &c., to a simple ROUGHNESS or ASPIRATION impressed upon a vowel sound, as h in heat, hate.* (31.)

10. The consonant differs, therefore, from a vowel, much in the same manner as a crack, a crash, a hiss, or other rough sound differs from a musical one. The consonants being thus the harsher elements of language, form, like the bones of the human body, the substantial frame work of speech. The vowels then fill up the outlines, and make the perfect and harmonious development of language.

11. The first thing to be done by the student of phonography, after fully appreciating what is meant by an element of speech, or a spoken sound, which is the same thing, is to analyse the words which are to be written into the elements which compose them, distinguishing the consonants and vowels from each other. It is rather difficult to utter some of the consonants without joining a vowel with them, as their sound is instantaneous and cannot be prolonged. The name which they bear (from the Latin *con* and *sonans*, *sounding along with*) was originally bestowed from the idea that it is impossible to pronounce a consonant without a vowel either preceding or following it. This impression is, however, erroneous. Most of the consonants are even capable of being prolonged like the vowels. This is the case, for example, with the hissing sound (*s*) above mentioned, which may be lengthened out to any extent without at all losing its own consonant quality. The most difficult to utter by themselves are those in which the contact of the organs is the most perfect and complete. The sounds which come particularly under this description are those represented by *p*, *t*, and *k*; the first made at the lips, the second at the teeth, and the third at the root of the tongue, near the throat. There is likewise a corresponding series, *b*, *d*, and *g* (hard, as in *give*), which are mere modifications of the former, as will be more fully shown in Chapter 1st, in treating upon the Alphabet. Both of these series of sounds are denominated *mutes*, as if it were intended to intimate that they are entirely destitute of sound. But it is manifestly absurd to speak of a species of sounds which are destitute of sound, and they are more properly distinguished by the term *abrupts*, which we, therefore, prefer.

12. The particular names which have been heretofore given to the first three of those letters, for example, in the old alphabet, are, *pe*, *te*, and *kay*; but in pronouncing these *names* we pronounce a vowel sound, which is of course no part

of the consonant. In the first two, the vowel is *e*, and in the third it is *a* or *ay*. If we then endeavor to pronounce so much of this name as *is not the vowel*, we shall hear a mere sudden crack or explosion of the organs, (*at the commencement of the syllable*, or a corresponding concussion *at the end*,) which is the true consonant. The effect will be different according to the seat of the sound, or part of the mouth at which it is made. A little practice will enable a person to explode these abrupt consonants without the aid of any appreciable amount of vowel sound.

13. The learner, who is unused to the analysis of sounds, will also experience some difficulty, doubtless, in separating a portion of the vowels from their connection with consonant sounds. The short and explosive vowels heard in *sin*, *men*, *man*, &c., are never *named*, in the old method of spelling, *by their own sounds*. They are called, on the contrary, by names which are the same as the vowel sounds which are heard in the words *sign*, *mean*, *main*; or, which is the same thing, like the entire words *eye*, *ee*, (Scotch word for *eye*,) and *aye*; and this and similar habits so confuse the appreciation of sound by the ear, that many persons seem to think that they actually hear the sound *eye* in the word *sin*, because they give that name to the letter *i*, which they use in writing it. To discover the true vowel sound, which is heard in this word, let the reader first pronounce the whole word distinctly, *sin*; then, dropping the final *n*, pronounce the remainder of the word just as he did before, and just as if he were going to pronounce the whole word, but suddenly stop before the last consonant is uttered. Let him then reject the *s* sound from the beginning of the word, preserving still precisely the sound which he had previously given to what then remains of the word, and he will have a short, jerked sound, which cannot be written by the old alphabet, for the want of any distinct character to represent it. This sound is the true vowel heard in *sin*; it

has no resemblance to the sound of the word *eye*, but is, on the contrary, a short, explosive, and suddenly stopped sound, resembling *e*.

14. In the same manner, the vowel sound heard in the word *men* is not *e*, as it is called, but a sound much more nearly resembling *aye*. As in the former case, however, it is jerked in the utterance, sounding like the interjection *eh!* sometimes used to denote inquiry. There are six of these stopped vowels in the language. A few hours practice will enable a person to pronounce them by themselves with nearly as much ease as he pronounces the full vowels.

15. When the student is able to analyse words into their component sounds, he is in a condition to begin to learn to write them; but he must always bear in mind that *he is in no case to have the slightest regard to the old method of spelling*. All the spelling which he will be required to do, will be merely to pronounce slowly, one element after the other, as distinct parts of the whole sound or word; which parts must be so small that they cannot be divided into anything less than themselves. These parts will then be the elements of sound, for which phonography will furnish the signs. For the sake of brevity, two or more sounds are sometimes written by one sign, but the means always exist of writing them separately when it is desirable.

16. It must be observed that it is not the province or business of phonography to teach the pronunciation of words, but merely to furnish the means of writing them in whatever manner the writer may choose to pronounce them. In this manner we shall be able to show how different writers actually do pronounce, which cannot be ascertained by the old method of writing; and thus phonography will doubtless be the means of finally settling pronunciation by one uniform standard among all who speak the language.

NOTE.—The learner of Phonography is recommended, in studying the following pages, to omit the study of those portions which are printed in small types, and which relate more to the science of Phonetics, until he has become somewhat familiar with the *practical business of writing*, in acquiring which, his motto should be

“PRACTISE AND PERSEVERE.”

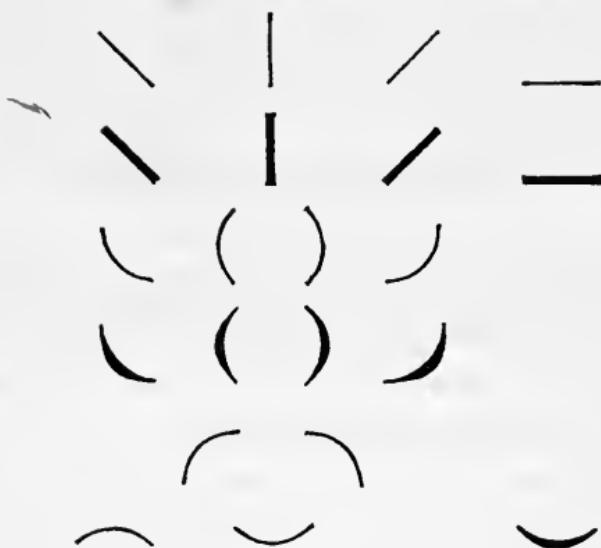
PHONOGRAPHY.

CHAPTER I.

OF THE ALPHABET, AND THE SEVERAL DIVISIONS OF THE CONSONANT SOUNDS.

17. The term *alphabet* is derived from the first two letters of the Greek alphabet, — *alpha* and *beta*. Hence, in strictness, it is only applicable to an arrangement of letters beginning in the same manner. By usage, however, it is now applied to any arrangement of the letters by which a language is written. Thus, we speak of the Sanscrit alphabet, though the first letter in that, and other languages derived from it, is *K*. In the Arabic language, and in the Masoretic writing of the Hebrew, the term alphabet is not understood as including the vowels, which are written by small points placed as a kind of appendage to the consonant characters. The vowels are written in the same manner in Phonography; and it will be found of great advantage, in treating of it, to make the terms *alphabet* and *alphabetical* refer, in a similar manner, to the consonants alone.

THE ALPHABET.



Ambigues.

SIGNIFICATION OF THE ALPHABETICAL SIGNS.

18. Before proceeding to the study of the alphabet, the learner must observe that part of the signs are *light* lines and curves, and part of them *heavy*. The reason of this arrangement is explained in the latter part of this chapter, and it will be found to be of the utmost importance, practically, and of great philosophical beauty, with reference to a true representation of sounds. (33.)

19. The following signs represent the consonant sounds belonging to the single letters of the old alphabet, which are placed immediately after them, but without any vowel addition, such as is heard in the names *pe*, *ef*, &c. (12.) ; thus, \ *p*; \ \ *b*; \ \ *f*; \ \ *v*; \ \ *m*; | *t*; | *d*;) *s*;) *z*; / *l*; \ \ *r*; \ \ *n*; / *j*, or *g* soft, as in *gem*; — *k*; — *g* hard, as in *give*.

20. The following signs represent *simple* consonant sounds for which there are no *single* letters in the old alphabet, and for which combinations of *two or more* letters must, therefore, be used; thus / represents the sound of *ch* in *much*, or *tch* in *witch*. The sign (represents the sound of *th* in *thigh*; and (the corresponding heavy sign, that of *th* in *thy*. The difference between these two sounds, constitutes the only difference between the words *thigh* and *thy* when spoken. This difference is not noticed at all, in the old method of writing, though it is equally as great, and of the same kind, as the difference which exists between the sounds of *t* and *d*, as in the words *tie*, *die*. (33.) The sign / represents the sound *sh*, heard in *pressure*; / that of *zh* in *pleasure*; and / that of *ng* in *ring*, *sing*, *lov-ing*.

21. The three small signs attached to the alphabet, under the name of *ambigues*, represent the sounds of *w*, *y*, and *h* (9). They are written in a peculiar manner, similar to that in which the vowels are written, and will receive a particular explanation hereafter (91, 97, 52). They are barely introduced here to complete the view of the consonant-signs; but they approach the nature of vowels, and, as their forms are quite different from those of the other consonant-signs, they are not generally included when we speak of the *alphabetical characters*. (17.)

NOTE.—*C*, *q*, and *k*, in the old alphabet, have no sounds of their own. *C* sounds like *k*, in *can*, like *s* in *cellar*, like *z* in *suffice*, and like *sh* in *commercial*. *Q* always has the sound of *k*; and *x* sounds like *ks* in *exercise*, or like *gz* in *exert*. (77.) These letters, of course, have nothing corresponding to them in phonography, in which the sounds only that are actually heard are written. (15.)

OF THE MOVEMENT OF THE HAND IN MAKING THE ALPHABETICAL SIGNS.

22. The *perpendicular* and *inclined* signs are made by commencing at the *top* of the sign, and carrying the hand *downwards*. There are two or three exceptions to this rule, for the sake of greater convenience and elegance in writing, which will be noticed in another place. (81.)

23. The five following signs, — *k*; — *g*, *hard*; — *m*, — *n*, and — *ng* are called *horizontals*, and are made from *left* to *right*.

The point where the pen begins to trace a sign, is called the beginning of the sign, and the point at which it stops is called the end. It is important, as will be seen in the next chapter, that these directions for making the sign should always be observed. (36.)

OF THE FORMS AND SIZE OF THE ALPHABETICAL SIGNS, AND OF THE BEST METHOD OF HOLDING AND USING THE PEN.

24. The simplest signs which it is possible to obtain for written characters, are I. the *dot* or *point*, II. the *straight line*, and III. the *curve*. The *dots* are used as *vowel-signs*. (34.) The consonant-signs are, therefore, either *straight lines* or *curves*. The *curves* are quarter circles, or arcs of 90 degrees; thus, they are just enough curved to show distinctly that they are deviations from a *straight line*. The *straight line* cannot be placed in more than *four* positions, with a sufficient difference to be distinguished readily, and to prevent mistaking one sign for another. These positions of the *straight line*, as it is employed in phonography, are the follow-

ing, viz.: a perpendicular, a horizontal, and an inclination of 45 degrees on each side of the perpendicular, thus:—



But by making use of light and heavy lines the number of these signs is doubled. Again, by dividing the circle into quarters, in two different ways, eight distinct *curves* are obtained, thus:—



Then, by making these curves light and heavy, the number is doubled, giving sixteen curve-signs, which added to the eight straight-line signs, make twenty-four—the greatest number of lines and curves which can be used without danger of confusion. But the number of single consonants being only twenty-one (including *ch* and *j*), this still leaves us a surplus of three signs, which are subsequently brought into use.

25. A line from point to point of any curved-sign, should be equal in length to the straight-line signs.

26. Different persons will make their consonant-signs somewhat different in length; but the greatest beauty of the hand-writing seems to be obtained when they are made about one-sixth of an inch long, thus:  In the tables, at the heads of the chapters in this book, they are enlarged, so as to strike the eye more readily, and so to aid the memory in retaining them; and the learner will do well to make them large at first.

27. The curved heavy consonant-signs should be made thick in the middle only, and taper off towards each extremity, otherwise they will present a clumsy appearance.

28. The *learner* should always write upon lines, and he may use either a quill or a steel pen, or a pencil with which a light or heavy mark may easily be made. He should be careful not to hold the pen as for common writing, for this position of the hand is adapted for the formation of letters constructed upon a totally different principle from the signs used in phonography. The pen should be held loosely in the hand, like a pencil for drawing; with the nib turned in such a manner that the sign  can be struck with ease. It is then in a proper position for striking any sign, except  and  which are of comparatively rare occurrence,

and, for these signs, the pen can be turned in the hand, as may be easily done when it is held in the manner described. Reporters generally write with a pencil, and upon ruled paper. Letters, and all documents for future reference, should be written with a pen.

The beginner generally experiences some difficulty, unless he has been accustomed to back-handed writing, in making the strokes from left to right; and is apt to imagine that he shall never be able to strike \backslash with the same ease with which he can execute $/$. This difficulty is, however, entirely the result of habit in writing otherwise; and after a very short practice he will find that the muscles acquire complete facility in this and all the other movements required in Phonography,—proving that the hand is an instrument admirably adapted to the execution of all geometrical forms.

29. No effort should be made by the learner, at first, to write rapidly; accuracy alone should be aimed at, and rapidity will be the necessary result of practice. Ruled paper is preferable, especially for beginners, though not absolutely necessary. When plain unruled paper is used, a line is always presumed to pass through the bottom of the consonants, as they occur singly, thus: \backslash | \backslash &c.

CLASSIFICATION OF THE CONSONANTS.

T A B L E.

			6 Labials or lip sounds,				
4	<i>Whispered,</i>	{	Abrupts	↖ p	↖ t	↖ ch	— k
4	<i>Spoken.</i>			↖ b	↖ d	↖ j	— g
4	<i>Whispered,</i>	{	Semi- vowels	↖ f	(th) s	↗ sh	
4	<i>Spoken.</i>			↖ v	(th) z	↗ zh	
2				↖ l	↗ r		
3				↖ m	↗ n	↖ ng	
3				↖ w	↖ y		↖ h

EXPLANATION.

30. The system of Mr. Pitman is founded upon a minute and careful examination of the organs of speech. He was led, therefore, to place the letter *p*, the sound of which is the least complicated of all the articulations, at the head of his alphabetical arrangement. This sound is formed at the very edges of the lips, not requiring the assistance either of the teeth, the

tongue, or the palate, in its production ; and is among the first consonant sounds uttered by a child. Next, in order, stands *b*, and then, according to his arrangement, *t*, *d*, &c.

It is believed, however, that the arrangement of the alphabet which we have adopted, and to which we have adhered throughout the present work, will *exhibit* the beautiful harmony of the system resulting from Mr. Pitman's analysis of the sounds, in a degree of which he himself has been hardly aware. Truth, when once discovered, unfolds new beauties to all who contemplate it.

In the above arrangement of the alphabet, if we first separate the signs into perpendicular columns, as they stand, the several columns will represent the several classes of consonant sounds, with reference to their local and organic formation, that is, with reference to the parts of the mouth at which, and by which, they are formed. If we separate them again horizontally, they represent the same sounds, classified with reference to the application of the organs in forming them, and the resulting nature or quality of the sounds themselves. The vacant spaces, in the alphabetical table, may be filled by the signs of sounds which are heard in foreign languages.*

* The Alphabet of Nature, embracing the sounds of which all languages are composed, includes a given number of sounds, probably not exceeding in all sixty vowels and consonants. From these, the English select those sounds which are necessary for their language, and the French, the Spanish, the Germans, &c., those which they require, always within the same general circuit of sounds ; but each leaving some sounds unemployed, which are found in the Alphabet of Nature. To discover and arrange the full alphabet of nature, is a distinct branch of the writing and printing reformation. The present work relates only to the English language ; but, as this language has in it an unusually large number of sounds, most other languages can be written quite intelligibly by our phonetic alphabet.

FIRST DIVISION OF THE CONSONANTS.

31. In the first division of the consonant sounds, we begin with those formed at the lips, as *p*, *b*, *f*, &c.; we then go back to the region of the tip of the tongue, and the teeth, as *t*, *d*, &c.; then to the hard palate or roof of the mouth, a little back of the teeth, as *ch*, *sh*, &c., and, finally, to the root of the tongue, near the throat, where the *k* is formed. Hence, these several classes are called, I. *Labials* or *Lip-sounds*; II. *Linguo-dentals* (*tongue-teeth sounds*); III. *Palatals*; and IV. *Gutturals* or *Throat-sounds*.

The *Labials* are made by quite or partially closing the lips, or by placing the upper teeth upon the lower lip. The *Linguo-dentals*, by placing the point of the tongue against the tips or roots of the teeth, or bringing them nearly into contact. The *Palatals* are made in nearly the same manner, but a little farther back; and the *Gutturals* by pressing the root, or body of the tongue, against the roof of the mouth.

SECOND DIVISION OF THE CONSONANTS.

32. The second division of the consonant sounds, relates, as already stated, to the method of applying the organs in forming them, and to the resulting nature or *quality* of the sounds. They are denominated, accordingly, I. *Abrupts*; II. *Semi-vowels*; III. *Liquids*; IV. *Resonants*, or *Nasals*; and V. *Ambigues*.

I. The *abrupts*, are made by a complete contact of the organs of speech, interrupting, or entirely stopping the breath or voice, and are the most perfect of the consonants. (11.) They are divided into *whispered* and *spoken*, a difference which requires a special explanation. (33.)

II. The *semi-vowels* are made by a less perfect contact of the organs of speech, so that the breath or voice partially escapes while they are uttered. Hence, as they begin to approximate towards the character of vowels, they are called *semi* or *half-vowels*. They are, likewise, both *whispered* and *spoken*. (9, 10.)

III. The *liquids* permit a still freer escape of the breath, and hence approach more nearly to the nature of vowels than the *semi-vowels*. They have so much of the *vowel* character, that they readily unite with the other consonants, (abrupts and resonants) forming double consonants, and sometimes syllables, without the aid of any vowel. (102.)

IV. The *resonants* or *nasals* combine, in their formation, the character of the *abrupts* and *liquids*. They are made by complete contacts of the parts of the mouth, while, at the same time, the sounding breath, or voice, is permitted freely to escape into the cavities of the head, and through the nose.

V. The *ambigues* hold, as it were, a middle place between the vowels and consonants. They are the feeblest of all the consonants, seeming to be mere modifications of vowels, by which the breath is very slightly obstructed. (21.)

NOTE I.—There are two sounds among the abrupts, as given above, which, it is thought by some, may be analysed into simpler elements. These are \diagup *ch*, and \diagup *j*; the first of which seems to be composed of \mid *t*, and \diagup *sh*, and the other of \mid *d*, and \diagup *zh*, but, for practical purposes, it is found extremely convenient to represent them by single signs.

NOTE II.—The sounds of — and — and — are made by stopping the voice at the lips, teeth, and throat, and are classed accordingly as *Labial*, *Linguo-dental*, and *Guttural*; but, at the same time that the voice is stopped at these points, it is thrown into the nose, or sounding board of the head, and made to ring there; hence they are called *resonants*, from the Latin, *resonare*, *to ring*, when we wish to speak of the quality of the sound; and *nasals*, when we speak of the seat of sound, at which the peculiar quality of their sound is imparted. They are generally known by this last name.

From this description, it is obvious that *they* are also a species of *ambigues*, connecting two classes of consonant-sounds, while the *ambigues*, so called, connect the vowels and consonants with each other. A strict attention to the place in the mouth where the different sounds are formed, will do a great deal to help the memory in retaining the signs.

OF THE DIFFERENCE BETWEEN THE WHISPERED AND THE SPOKEN CONSONANTS REPRESENTED BY THE LIGHT AND HEAVY LINES IN THE ALPHABET.

33. It will be seen by the student that the abrupts and semi-vowels are arranged in pairs, one of each pair being represented by a *thin* or *light* line, and the other by a corresponding *thick* or *heavy* line. By attending to any two of the sounds thus classed together, it will be found that one is, in fact, but a very slight modification of the other; thus the sounds of \backslash *p*, and X *b*, for example, are almost identical. We often hear persons saying *baptist* for *baptist*, and, on the other hand, *Jacup* for *Jacob*, without their being aware that they pronounce differently from others.

To follow nature, therefore, and preserve a correspondence between signs and sounds, the signs should be so formed as to show the resemblance of different sounds, as well as their difference; hence, there should be an analogy between the form of the sign and the sound represented by it. Upon this principle the Phonographic alphabet is made. The sound of *p* being a light whispered sound, is represented by a *thin* or *light* stroke \backslash and the corresponding sound of *b* being a *heavy* intonation of the voice, is represented by a *heavy* stroke, X being in the same position as \backslash . Thus, both the *difference* between the sounds *p* and *b*, and their *resemblance*, are at once represented. The same law of correspondence in sounds is found to *prevail* in the alphabet of nature, dividing them into *pairs*; and the same rule of representation, by *light* and *heavy* corres-

ponding signs, has, therefore, been adopted, both as respects vowels and consonants. It is natural to represent a *light* sound by a *light* stroke, and, in writing, it is perfectly easy to make it.

The same may be said in reference to a heavy sound. After a short practice in writing, every pupil finds that the heavy strokes are made without any additional effort; they flow from the pen with as much facility as their corresponding heavy sounds do from the lips. If we observe more clearly the nature of the difference between the light and the heavy intonations of these consonant sounds, we find that it depends on the time at which the speaking or *loud* voice is joined to or withdrawn from the utterance of the elements. When we utter the mere elementary sound of *p*, for example, not following it by a vowel or joining it to anything which precedes or follows it, it is heard as a whisper only; and, if, then, a vowel is made to follow, so as to form a word, as *pay*, the speaking, or *loud* voice, begins to be heard just at the instant when the lips are opened. But when we utter the sound of *b*, as a mere element, we hear the *loud* voice a moment before the lips are parted. This difference will become still more obvious, if a person endeavors to make these two sounds without opening the lips at all. In the first case no sound will be heard; and, in the other, a heavy rumbling of the voice, forcing its way, as it were, outward, will be distinctly audible. At the end of a syllable the case is reversed. In making the sound of *p*, the speaking voice is withdrawn just at the instant at which the lips close; as in *top*, *fop*, and in making that of *b*, it continues to be heard a moment after, as in *rob*, *fob*.

The first series of abrupts and semi-vowels, are hence called *whispered* consonants, and the second *spoken* consonants.

The similarity of these two classes of consonant-sounds is so great, that, if at any time the difference in the weight of the lines is not clearly made, this circumstance does not seriously

affect the legibility of the writing to the experienced Phonographer. Thus, for example, if the word *Massachusetts* were written so as to be pronounced *Mazajuzedz*, it could hardly be mistaken, and the intention of the writer would be quite obvious.

It is by availing ourselves of this natural analogy of the sounds, and denoting it by characters having a corresponding analogy, that we are enabled to represent all the consonant sounds by signs which are simple geometrical figures — the straight-line and the curve, — which cannot be done otherwise, and which has never before been accomplished in any system of writing.

CHAPTER II.

OF THE SIMPLE VOWEL-SIGNS, AND OF THE ASPIRATE.

TABLE.

First Group.

• . .
• . .
• . .

Second Group.

— —
— —
— —

EXPLANATION OF THE SIMPLE VOWEL-SIGNS.

34. There are thirteen simple vowels in our language, the signs for which are divided into two groups; and hence they will be distinguished as the *first* and *second* group of vowel-signs.

The vowel-signs of each group are so arranged, as to show the different positions in which they are placed to the consonant-signs. They have three positions, and are called 1st place, 2d place, and 3d place vowel-signs, according to their position.

When the vowel-signs are placed at the beginning of a consonant-sign, they are called *first-place*; at the middle, *second-place*; and at

the end, *third-place* vowel-signs; and they have a *local value*; that is, they represent different vowel sounds, according to their position.

The signs of the 1st group are *dots* or *points*; the signs of the 2d group are short *dashes*.

The *dots* and *dashes* are made both heavy and light. The *heavy* dots and dashes represent *full* vowels, and the *light* dots and dashes represent the corresponding *stopped* vowels. The difference between these two kinds of vowels will be subsequently explained. (47.)

OF THE MODE OF PLACING THE VOWEL-SIGNS TO THE PERPENDICULAR AND INCLINED CONSONANT SIGNS.

35. In writing, the consonant-sign is made first, and the vowel-sign is afterwards placed *to it*.

If the vowel occurs *before* the consonant, the vowel-sign is placed on the *left-hand* side of the consonant sign, *provided the consonant-sign is perpendicular or inclined*, whether a straight line or a curve. But, if the vowel occurs *after* the consonant, the sign for it is placed on the *right-hand* side of the consonant-sign.

OF THE SIMPLE VOWEL-SIGNS.

36. The *heavy* dot, when placed in the first position, opposite the beginning of the consonant-sign, represents the full sound of *e* in *feet*; thus, J *eat*, and J *tea*. When it is placed in the second position, opposite the middle of the consonant-sign, it represents the full sound of *a* in *mate*; thus, X *ape*; X *pay*. When placed in the third position, opposite the end of the consonant-sign, it represents the full sound of *a* in *psalm*; thus, X *pa*; X *bah*.

The heavy dots are called the **FULL vowel-signs** of the **FIRST GROUP**.

37. The *light* dot, placed at the *first* position, that is, opposite the beginning of the consonant-sign, represents the *stopped* sound of *i* in *fit*; thus, J *it*; U *if*. At the *second*, opposite the middle, like *e* in *met*; thus, F *ell*; X *ebb*. At the *third*, opposite the *end*, like *a* in *Sam*; thus, J *at*; J *as*.

The light dots are called the **STOPPED vowel-signs** of the **FIRST GROUP**.

The *heavy* dash, placed at the *first* position, represents the sound of *au* in *caught*; thus, J *ought*; J *daw*. At the *second*, that of *u* in *cur*; thus, X *err*. At the *third*, or *end*, that of *oo* in *fool*; thus, L *two*; J *ooze*.

38. The heavy dash, which, in the table, is placed in a perpendicular position, is made *parallel* to the consonant-sign, and represents the sound of *o* in *bone*; it is placed in the second position, opposite the middle of the consonant-sign; thus,  *bow*;  *show*;  *ode*;  *dough*.*

The heavy dashes are called the **FULL vowel-signs** of the **SECOND GROUP**.

39. The *light* dash, placed at the first position, represents the sound of *o* in *hot*; thus,  *odd*;  *of*. At the second, that of *u* in *cut, curry*; thus,  *up*. At the third, that of *u* in *full*; thus,  *foot*.

The light dashes are called the **STOPPED vowel-signs** of the **SECOND GROUP**.

The dashes should be written at *right angles* to the consonant-signs, or, when more convenient, they may be a little inclined; thus, *ought* may be written either  or  or ; but the sign for *o* must *always* be made parallel to the consonant-sign, as above. (38.)

* The full vowel *o* has no corresponding stopped sound in the English language, and, therefore, there is no parallel vowel-sign in the table of vowel-signs. The stopped sound of *o*, though not recognised, is sometimes heard in the American pronunciation of the words *stone, home, whole, &c.*

OF THE MODE OF PLACING THE VOWEL-SIGNS TO
THE HORIZONTAL CONSONANT-SIGNS.

40. The method of placing the vowel-signs to the horizontals, $\sim \sim \sim \sim$ necessarily differs from that which we have explained with reference to the perpendicular and inclined consonant-signs. They are placed *above* and *below*, in this manner; viz., if the vowel occurs before the consonant, the vowel-sign is written *above* the horizontal consonant-sign; if it occurs after the consonant, it is written *below*. The *first-place* vowel-sign occupies a position at the beginning; the *second-place* at the middle; and the *third-place* at the end of the consonant-sign; (23.) the order of the vowel-signs being, in this case, from left to right; thus, $\sim eke$; $\sim own$; $\sim egg$; $\sim am$, in which words the vowel occurs *before* the consonant; and, $\sim key$; $\sim know$; $\sim may$; $\sim ma$; in which the vowel occurs *after* the consonant.

With respect to the *horizontals*, therefore, it must be remembered that we *read from above, downwards*, instead of from *left to right*, as we read with the perpendicular and inclined consonant-signs.

OF THE METHOD OF NUMBERING THE VOWEL-SIGNS.

41. As before stated, the vowel-signs are called 1st, 2nd, and 3rd place vowel-signs, according as they occupy the 1st, 2nd, or 3rd *position* against the consonant-sign to which they are written, that is, at the beginning, middle, or end. It is of the highest importance to the student of Phonography that he should constantly associate each vowel with the position which its sign must occupy.

The following table will give an exact view of the simple vowel-signs with reference to their position :—

TABLE OF THE PLACES OF THE VOWEL-SIGNS.

1st place.	e	eat	ĕ	it	au	aught	ău	odd
2nd place.	a	eight	ă	ell	o	ode	uh	ĕh
3rd place.	ah	are	ăh	at	oo	oo	ăo	(omitted)

NOTE.—The stopped-vowels are designated in the table, when printed in the letters of the old alphabet, by the small half circle over the same letter which represents the corresponding full vowel ; thus, ĕ is stopped e in *fit*, (not short i,) ă is stopped a in *met*, &c. The phonographic vowel-signs are placed to different consonant-signs so as to form words. By committing these words to memory, as they occur in each of the lines in the preceding table, the positions of the signs will be easily retained.

OF THE MODE OF CLASSIFYING AND NUMBERING THE VOWELS, CONSIDERED AS SOUNDS, WITHOUT REFERENCE TO THEIR SIGNS.

42. The simple vowels form one series, which are divided into two corresponding classes—the *full* and the *stopped* vowels. They are numbered from one to seven in each class, as follows:—

Full.

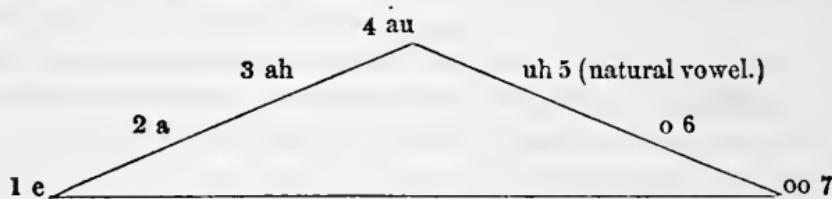
- No. 1. *e* as in *feet*.
- “ 2. *a* “ *mate*.
- “ 3. *ah* “ *psalm*.
- “ 4. *au* “ *naught*.
- “ 5. *uh* “ *cur*.
- “ 6. *o* “ *note*.
- “ 7. *oo* “ *fool*.

Stopped.

- No. 1. *ĕ* as in *fit*.
- “ 2. *ă* “ *met*.
- “ 3. *ăh* “ *Sam*.
- “ 4. *ău* “ *cot*.
- “ 5. *ăh* “ *curry*.
- “ 6. has no corresponding stopped sound in English.
- “ 7. *ăo* “ *foot*.

43. The vowels in the first column above, are called, the first, second, third, fourth, fifth, sixth, and seventh, *full* vowels; and those in the second column, the *stopped* vowels. The stopped vowels are short sounds which correspond to the full vowels, and are numbered accordingly. Both the full and stopped vowels should be learned, so that the pupil will know each one separately by the number which it holds in the series.

44. The vowels are ranged in both classes, in their natural order, somewhat like the musical notes in the gamut. At No. 1 the mouth is least opened, and the corners of the lips most drawn back; hence it is called the slenderest and the sharpest of the vowels. No. 2 opens the mouth a little more; No. 3 still more; and No. 4 most of all; hence this is called the broadest vowel. At No. 5 the mouth is less opened. In pronouncing the full vowel of this number, the organs of speech are relaxed into their natural or unconstrained position, and vocal breath is uttered through them in that shape; hence this is called the **NATURAL vowel.** (50.) At No. 6, the mouth being nearly in the same position, the lips are rounded nearly into a circle; and at No. 7 they are protruded into a tube. Hence, this last may be called the roundest of the vowels. If we place these vowels, therefore, to a triangular diagram, the numbers, one, four, and seven, will occupy the angles; the others are intermediate, thus —



45. The 1st and 4th sounds may be regarded as the opposites of each other, in the qualities signified by the terms *slender* and *broad*, and the 1st and 7th as the extremes in those qualities which are called *sharp* and *round*. Analogies of this kind have always been perceived, and have given rise to the different designations of sounds, as long, and short, broad, flat, &c.

46. The whole series of seven sounds, forms a harmonious and graduated succession, only slightly interrupted by the fifth or natural vowel, among the full vowels.

**DISTINCTION BETWEEN THE TERMS STOPPED AND FULL,
AND LONG AND SHORT.**

47. It will be seen, in the preceding table, that there are two classes of simple vowels, which have a perceptible correspondence with each other, while they do not represent precisely the same quality of sound.

The first class are called *full*, and the second *stopped*. These terms must not be confounded with *long* and *short*, which relate, not to the *quality* or the *nature* of the sounds, but merely to the *quantity* of the sound uttered, or rather to the *length of time during which the sound is continued*. The *stopped vowels* are, in fact, always *short*, but the *full vowels* are not uniformly *long*. They are generally long in accented syllables, and short in those that are not accented; thus, in the words mate, Saviour, afraid, the vowel *a* is full and long, and in Sunday, ariel, gateway, it is, at the same time, both *full* and *short*. The full vowels, whether long or short, are written in the same manner, by the full vowel-signs, that is, by the heavy dots and dashes. The distinction, not being essential and uniform, but varying with the emphasis and other incidental circumstances of speech, belongs as much to *expression* as to correct *pronunciation*.

The stopped vowels in the English language are always followed by a consonant sound in the same syllable. A vowel, not so followed, though it may be *short*, is always *full*, and must be written with a large dot or dash; for example, in the word ^{1 2 3 4 5 6 7} *indivisibility*, the second, fourth, sixth, and seventh, syllables have the short quantity of the first full vowel, which is accordingly represented in each, when written, by the first-place heavy dot, though the beginner would be very likely to use the small dot for every syllable.

A full vowel is, therefore, merely a vowel which expires naturally after either a long or a short duration, and a stopped vowel is one which is abruptly broken off in the utterance.*

PARTICULAR OBSERVATIONS UPON SOME OF THE VOWELS.

48. There is one other vowel sound, coming between the second and third vowels, and heard in the words *air, there, care, pair, hare*, &c. This sound only occurs in English when followed by the consonant *r* in the same syllable, and is produced by the corrupting influence of this consonant, which, not being a perfect contact, but a mere trill or jar of the tongue, has a constant tendency to lose its consonant character, and, by combining with the preceding vowel, to change its pure sound.

This vowel may be described, when necessary, as No. 2 $\frac{1}{2}$.

* It is regarded by Mr. Pitman, and Mr. Ellis, as the essential peculiarity of the stopped vowels, that they *cannot* be pronounced, except when followed by a consonant in the same syllable. We are not quite satisfied with this description of the stopped vowels. Any vowel is, it seems to us, *stopped*, in the same sense in which we speak of a stopped vowel, when it is, as it were, snapped off by a sudden and abrupt suspension of the voice, whether a consonant sound be heard after it or not. The fourth tone of the Chinese, called *Yap shing*, is nothing else but the stopped utterance of the vowels, and, what is very much in point, in the Canton dialect it is always followed by *p, t*, or *k*, the three most perfect and abrupt consonant sounds, while in the *Mandarin*, a more effeminate dialect, the consonants are entirely left off, the vowels still retaining the same tone, which is described by the Chinese scholars, as 'short, snatched, abrupt, and quickly treasured up.' In the Seneca, one of the North American Indian languages, there is likewise an entire series of stopped vowels, which end syllables and words. This pronunciation is marked by affixing the character *h*, which is not sounded, but merely shows that the voice is suddenly suspended. We have an instance of the same kind in the English interjection, *eh!* abruptly, and, as we think, ordinarily pronounced. (6.) If so, this forms an exception to the rule in the text.

It occurs in foreign languages and provincialisms, not followed by *r*, and the proper vowel-sign for it is, *two heavy dots* placed opposite to the middle of the consonant-sign and parallel with it; thus, and express a local pronunciation of *\ Pa*, and *\ Ma*, the contracted forms of the words *Papa* and *Mamma*.

In ordinary writing, however, one of the dots is omitted, leaving the second vowel-sign, which will then be read with this peculiar sound, when followed by the consonant *r*, so that no ambiguity results from this omission. The word *air* is, therefore, written thus, and other words of this kind in the same manner.

49. The 3d vowel *ah*, (*a* in *father*,) is named and sounded, as we frequently hear the name of the consonant *r* imperfectly uttered in naming the letters of the old alphabet. Some beginners are troubled by this circumstance to distinguish when the vowel or when the consonant is meant. The difficulty will be removed by considering the nature of the consonant *r*, which is, in most languages, a strong trill or sudden vibration of the tongue, and is so pronounced by the Irish and Scotch in speaking English. The English and Americans, however, seldom pronounce the *r* as an actual trill, but merely turn up the point of the tongue, and very slightly obstruct the vocal breath — a modification of the sound which is termed the half-trill. At the end of a syllable this obstruction is hardly perceived by many persons, and, by incorrect speakers, is frequently not even made, so that, in pronouncing the word *err*, for example, nothing is really heard but the natural or full vowel *uh*. In the same manner, inasmuch as the old name of this consonant is made by prefixing *a*, sounded like the third full vowel (*ah*) to the letter *r*, thus *ar*, and as the trill, which the *r* should represent, is then sometimes suppressed, this vowel comes to be, in fact, all of the name that is heard, when the consonant is spoken of. This difficulty is obviated

by calling the consonant *re*, instead of *ar*; but the phonographer has but little occasion for the name, as he should accustom himself to give the sound instead, which it will be best for him to practise as a *full trill*. This consonant, therefore, must be written, in phonography, at the end of syllables, or following a vowel in the same syllable, as it is slightly heard in the pronunciation of the best speakers, though the general usage seems to tend to the complete obliteration of this sound in these positions.

50. The fifth full vowel *uh* is called the *natural vowel*, because it is made while the organs rest in the most easy and unrestrained position; thus, by merely opening the mouth, we breathe out the voice without any effort to modulate it, and the vowel is formed. This sound, the most frequent one in the language, occurs very often in most of the languages of Europe, none of which have any letter in their existing alphabets to represent it. It is represented, in English, in the old orthography, or heterography, by all the vowels in turn, and by numerous combinations of these vowels besides. When the vowels of the old alphabet have this sound, they are designated, in some of the more recent dictionaries, as *obscure*. It is heard in the following words, where the vowel is printed in italics, or where a hyphen is inserted:—*along*, *China*, *important*, *practical*, *shopman*, *lover*, *confident*, *dozen*, *nadir*, *orator*, *error*, *anger*, *honor*, *particle*, *fab-le*, *bott-le*, *schis-m*, *rheumatis-m*, *ryth-m*; *sir*, *fir*, *firm*, *her*, *cur*, *burr*.

In all these, and similar cases, this vowel sound is represented in phonography, by the heavy dash at the second or middle place, at right angles with, or inclined to the consonant character; as in the words  *Anna*,  *ago*.

51. The learner must not forget that a full vowel is not always long. (47.) This vowel is, in fact, never long in English, except when followed by an *r* in the same syllable,

as in *sir, her, burr, &c.*; in which case some other vowel has been converted into this sound by the corrupting influence of the *r*. Indeed, this vowel is heard in almost every degree of length or quantity, from its long sound, in this position before *r*, to the shortest possible quantity which a vowel can have, as when it is heard in the words *partic-le, fab-le, schis-m, &c.* The existence of a vowel sound, in these latter cases, may be questioned by some, but it is believed that a comparison with the French pronunciation of similar words, in which the vowel is actually excluded, or else pronounced slightly at the *end* of the words, will convince the reader that we always insert a vowel-sound, however slight, before the final consonants in this class of words. As phonography, however, does not pretend to dictate in matters of pronunciation, questions of this sort will be finally settled by the authority of the best writers.

OF THE BREATHING.

52. The third or last of the three sounds called *ambigues*, in the alphabetical table, and represented in the old alphabet by the letter *h*, is distinguished as the *breathing* or the *aspirate*. It never occurs except immediately before a vowel, and it is written in phonography by a *small* dot placed before the vowel-sign; thus, **¶** heat, **¶** hope, **¶** hat. (9.)

The dot should be made light, because, if heavy, it might be mistaken for a full vowel-sign, and create some confusion in words with which the reader is not familiar; thus, **¶**

might be read *ee-eat*; but a *stopped-vowel* never occurs before another vowel, so that the small dot, although the sign used for a stopped-vowel, can only be read for the breathing, when in this situation.

There is, however, another sign for the breathing, the form and use of which will be explained hereafter. (87.)

CHAPTER III.

OF THE PROPER DIPHTHONGS.

TABLE.

<i>First place,</i>	v		
<i>Second place,</i>		v	
<i>Third place,</i>			^

EXPLANATION OF THE PROPER DIPHTHONGS, OR COMPOUND VOWEL-SIGNS, AND THE MODE OF PLACING THEM TO THE CONSONANT-SIGNS.

53. The small angular figure in the table, with the point *downwards*, represents the sound of *i* in *high*. It is a first-place sign, and is written thus, *buy*; *my*; *ire*.

54. The same shaped figure, with the point *upwards*, represents the two proper diphthongs *oi*, in *boy*, and *ow*, in *how*. When it occupies the *first* position, this sign represents the sound *oi*; thus, *boy*; *toy*; and when it is in the *third* place, it represents the sound *ow*; thus, *bough*; *cow*; *hour*.

55. In placing these signs to the consonant-signs, care must be taken not to incline them according to the position of the consonant-signs; they must always retain the positions which they have in the table, pointing upwards or

downwards, in whatever position the consonant-sign may stand or lie, as in the examples.

It will be observed that the second and third places in the table, for the sign opening *upwards*, are vacant, and also the second place, for the sign pointing *downwards*. The reason of this is, that there are other diphthong-sounds in the Alphabet of Nature, not used in the English language, the signs for which might occupy those places.

OF THE NATURE OF THE DIPHTHONGS.

56. Diphthongs are of two kinds — *proper* and *improper*. The proper diphthong is a compound or transition vowel-sound, the organs of speech being in the position to utter one simple vowel-sound at the beginning of it, and in a position to utter a different simple vowel-sound at the conclusion of it, so that the two simple sounds are both heard in full, or in part, but often so blended together as to seem to the ear but one sound. Thus, in uttering *i* in *high*, the organs, at the commencement of the sound, are in the position to pronounce the third or the fifth simple vowel *ah* or *uh*, and, at the end, they are in a position to produce the sound of the first vowel *e*, but the simple sounds are too much blended to be distinctly heard.

The second proper diphthong (*oi*) in *hoy* is composed of the fourth and first full simple vowel-sounds; thus, *au-e*, which are distinctly heard.

The third proper diphthong (*ow* in *how*) is composed of the third and seventh full simple vowel-sounds, *ah-oo*, somewhat more blended.

The *improper* diphthongs are defined and explained in a subsequent chapter. (91.)

CHAPTER IV.

OF THE COMBINATION OF THE CONSONANT AND VOWEL-SIGNS.

GENERAL DIRECTIONS FOR WRITING AND READING CONSONANT AND VOWEL-SIGNS IN COMBINATION.

57. In beginning to write, the first thing for the learner to do, is, to analyse the word he wishes to write into its elementary sounds, as directed in the Introduction, page 13. Having done this, the consonant-signs are then to be written before any attention is paid to the vowels. The consonant-signs for a word, must *all be written without taking off the pen*; the second consonant-sign, commencing where the first one ends, and the third at the end of the second, and so on. This will give the *skeleton* or *frame* of the word, to which the *vowel-signs* are afterwards to be affixed.

For example, there is one consonant in the word *eat*, | *t*, which is made first. The sign for the first-place full vowel, of the first group, which is the vowel in the word *eat*, is then put to it, thus, | *eat*. In the word *act*, there are two consonants, which are first written together, thus, | *k-t*, and the skeleton, thus formed,

is afterwards *vocalized*, as adding the vowel-signs to the consonant-signs of a word is called; thus,  *act*. In the word *family* there are three consonants, which are written one after the other; thus,  *f-m-l*, and the word completed, thus,  *family*.

The learner may find a little difficulty in the beginning, in analysing words in this manner, but this is soon overcome, and the process becomes a simultaneous operation with the movement of the pen, so that the writer is no more conscious of effort than in the old method of writing. He would do well to *utter* aloud the consonant-sounds *as he writes their signs*. (12.)

58. The consonant-signs must be made as directed in the first chapter, viz: the perpendicular and inclined signs from the top, downwards, and the horizontals from left to right. (22, 23.) They must be joined in the manner described above, without lifting the pen until the skeleton is finished.

59. In reading, precisely the same order must be observed, that is, they must be taken up or uttered in the order in which they are made in writing them, which order is determined by the above rules. Thus, for example, in reading  it is certain that the —

was made first, because the writer could not have begun at the angle without violating the rule which requires that the frame of a word shall be written without taking off the pen, and he could not have begun at the bottom of the | without violating the rule, that perpendicular and inclined consonant-signs must be made *downwards*; the — must, therefore, be read before the |

In this word, however, the vowel-sign being placed above the first consonant-sign, which is a horizontal, must be read before it, according to the rule in that case. (36.)

It will sometimes happen that a consonant-sign which seems to be further along than another, in the line of writing, must be read first; thus, / is read *ch-t*, and will make the words, / and / *cheat* and *chat*. Here, also, since both / and | must be made downward, and as, by the other rule, the signs must be joined without taking off the pen, it is obvious that the / was made first, and the | afterwards.

60. With reference to the manner of reading vowel-signs, placed to the consonant-signs, it must be strictly observed that each particular consonant-sign, and the vowel-sign or signs placed to it, must be read precisely as they

would be read if they stood entirely by themselves, unconnected with any other consonant-signs; thus, *ʃ* one of the examples given above, is read *chat*; which will be clear to the apprehension of the learner, if he adheres strictly to this rule, reading the *χ* (*ch.*) first, and then taking up *ʃ* (*t.*) just as he would do if these last two had no connection with anything else; he will, on the contrary, be liable to great confusion if he looks at the position of the vowel-sign relatively to the whole skeleton of the word which it seems to precede, instead of regarding it with sole reference to the particular consonant-sign to which it belongs. By then retaining in mind the rules in chapter II., directing to read from left to right, as respects perpendicular and inclined consonant signs (35), and from above downwards as respects the horizontals (40), the difficulty will entirely disappear.

Care must be taken to distinguish the case of an inclined consonant-sign from that of a horizontal; thus, *ʌ* is *have*, the vowel-sign being read first; and *ɷ* is *gnaw*, the vowel-sign being read last, though the learner is quite apt to regard the vowel-sign, in each case, as *below* the consonant-sign, and, therefore, similar in position; he must, however, remember that,

as respects inclined characters, like the  the position of the vowel-signs are not distinguished as *above* and *below*, but according as they stand, at the *left hand*, or at the *right hand* of the consonant-sign, considered as a whole.

PARTICULAR DIRECTIONS FOR PLACING THE VOWEL-SIGNS TO THE SKELETONS OF WORDS.

61. The rule for placing the vowel-signs to single consonant-signs has been given in the second chapter. (35, 36.) For vocalizing words, which contain two or more consonants, some further explanation is necessary.

When the vowel comes between two consonants it is easily seen that it may be placed to either consonant-sign, and still be read in the same manner; thus, the word *pat* may be written  or  both which forms would be read alike. It is desirable to keep the vowel-signs away from the angles or places where the consonant-signs join, especially if they would come inside of the angle, because otherwise it is difficult to tell to which consonant-sign they belong; thus, it cannot be told whether  is the word *balm* or *beam*. The first and third-place vowel-signs only are liable to this ambiguity. To avoid errors, on this account,

and to secure some other advantages, the following rule and exceptions are established.

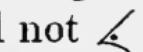
62. *Rule.* — When a vowel, or diphthong, comes between two consonants, the sign for it should be written against the first consonant-sign; thus,  beam;  bane;  time.

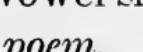
1st. *Exception.* — The third-place vowel-signs must *all* be written against the second consonant-sign; thus,  balm;  tack;  town.

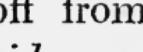
2nd. *Exception.* — The second-place *stopped* vowel-signs are also generally written against the second consonant-sign, merely because we have an opportunity, in this case, to distinguish it from the full-place sign, by *position*, as well as by the size of the dot or dash; thus,  is mate; and  is met.

3rd. *Exception.* — The parallel vowel-sign for *o* may be written to either, as is most convenient; thus,  or  roam.

Some deviations from these rules occur in the use of contracted forms of writing, which will be explained hereafter. (76.) So, in words of more than one syllable, it is better to write the vowel-sign to the sign for the consonant to which it seems to belong, in dividing the word into syllables. The full vowel is generally uttered with the first, and the stopped with the second consonant. Thus,  is preferable to

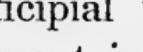
¶. *booty.* This mode of writing must not be employed, however, if it would bring the vowel-sign into an acute angle, and thus *charm* must be written  and not .

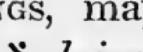
63. If two vowels come between two consonants, give one vowel-sign to each consonant-sign ; thus,  *poem.*

64. When two vowels begin a word, the *first*, and when they end a word, the *last*, is written a little off from the consonant-sign ; thus,  *iota* ;  *idea.*

OF THE PREFIXES *COM*, *CON*, AND THE AFFIXES *ING*,
AND *INGS.*

65. The prefix *com* or *con*, the most frequent in the language, is written by a light dot at the commencement of a word ; thus,  *com-mit* ;  *con-tain.*

66. The participial termination, or affix, *ING* (the most frequent in the language except *tion*), is expressed by a final light dot ; thus,  *pay-ing.*

The plural, *INGS*, may be written by two small dots ; thus,  *beings*, or it may be written out in full.

The method of writing other prefixes and affixes, will be explained hereafter. (152.)

CHAPTER V.

OF THE ALPHABETICAL AND VOWEL WORD-SIGNS.

CONSONANT WORD-SIGNS.

↖ up	↓ it	↙ which	—	come
↖ be	↓ do	↙ advantage	≡ {	give-n together
↖ for	(think)	↙ so	↙ shall	
↖ have	(them)	↙ was	↙ usual	
↖ will		↙ are		
≡ { me may	≡ { in no		≡ { thing language	

EXPLANATION OF THE CONSONANT WORD-SIGNS
(OR LOGOGRAMS).

66. By a *word-sign* is meant a single sign, used to represent an entire word. Each of the consonant-signs of the alphabet (see table), beside its use in spelling words, represents, likewise, the whole of the word which is placed opposite to it in the above table, whenever the sign is written by itself; that is, when it stands unconnected with any other sign. For example, ↖ is used, along with other signs, in writing *vail*, *vine*, *value*, *evil*, and every other word in which the sound of *v* occurs, but, standing alone, it is

read *have*, and is then called a word-sign. The words which are thus represented may at all times be written in full, when it is desirable to exhibit their precise pronunciation, and in that case only is the writing strictly phonetic. The use of word-signs is the first step towards *contracted phonetic short hand*; which, though it is not strict phonography, is still *equally legible*, since the word-signs are so arranged that they can never be mistaken for anything else, or for each other.

67. A word-sign is used for some word of very frequent occurrence, or one which, from its length, is an inconvenient word to write in full, and in which the most prominent sound is that represented by the sign.

NOTE.—When in any list of word-signs a word is printed with a hyphen, as *give-n*, the sign will represent either the whole word, or only so much as precedes the hyphen, which is, by itself, another word; thus, — is either *given* or *give*. Such words being nearly alike in sound, and yet different parts of speech, or otherwise incapable of being taken one for the other, cause no difficulty to the reader.

68. The horizontals (except —), inasmuch as they do not fill the space which a line of writing occupies, are made to represent two words, one when placed at the top of the line, thus, — *give*, — *me*, — *in*, — *thing*; and another at the bottom of the line, thus, — *together*, — *may*, — *no*, — *language*. The word-signs,

for the words printed in italics in the last table, are, therefore, to be placed at the top of the line, or space occupied by the writing. (88).

69. The vowels and compound-signs are also used to some extent as word-signs. The simple vowel and proper diphthong-signs used as such, are exhibited in the following table in this chapter. The use of the compound consonant and vowel-signs, as word-signs, will be explained in the respective chapters in which they are treated of.

NOTE. — Whenever a word-sign is written *above the line*, (as in the case of the horizontals just explained) the *vowel* contained in the word so represented, or if the word has more than one syllable, then the vowel in the *accented syllable* is a *first-place vowel*; thus, in *give*, *me*, *in*, and *thing*, the vowel is the first-place vowel, and in *given*, the vowel of the first syllable which is accented, is so. The same word-sign, if written *on the line*, stands for a word which has either a *second* or *third-place vowel* in the same situation; thus, *may*, *no*, and *come*, have second-place vowels, and *together* has a second, and *language* a third-place vowel in the accented syllable.

If any other word has the same pronunciation as that for which the word-sign is used, the word-sign will represent both, thus,  signifying *no* will also represent *know*. (71.)

T A B L E.

SIMPLE-VOWEL WORD-SIGNS.

Full.

1st place,	• the	^\ all	' or
2nd place,			
3rd place,	• a	^\ to	✓ who

Stopped.

1st place,	• him	^\ of	' on
2nd place,			
3rd place,	• and, an	^\ but	✓ should

Proper Diphthong Word-Signs.

1st place,	^\ I
2nd place,	
3rd place,	^ how

EXPLANATION OF THE SIMPLE-VOWEL AND PROPER DIPHTHONG WORD-SIGNS.

70. It will be remembered that the vowel-signs ordinarily have three places; but when used as word-signs, they have but two, as it is difficult to distinguish three positions when they stand alone. Hence, when the second-place

vowel-sign is used for a word-sign, it is brought down to the line, and takes the third-place, as \sim *but*, in the table above.

When the second-place vowel-sign is thus employed, the third-place vowel-sign is not used as a word-sign, and when the third is used, the second is not.

When a second-place vowel-sign is written on the line, and it is necessary to write a word consisting of a third-place vowel, the vowel-sign for it is placed *below* the line. The only instance of this kind, in the English language, is the interjection, *ah!* which must be written as a large dot *below* the line; thus, . The interjection, *eh!* which is now sometimes met with in light literature, requires some mode of representation, and may be written in the same manner, by a light dot below the line, though it is only a second-place vowel.

71. When, also, as sometimes happens, the whole word has the same sound as a vowel or diphthong, it is written by the corresponding vowel or diphthong-sign, whether that sign is used as a word-sign for some other word or not; thus, . (brought down to the line in the table above, according to the preceding rule,) is written for the article *a*, and the word *aye*, and \vee for the words *I* and *eye* only, while \sim is written

for *awe*, though it is at the same time a word-sign for *all*. So, when a vowel or diphthong-sign is a word-sign for a word sounded differently from itself, it will be written for all the words having the *same* sound. In this manner is written for *to*, *too*, and *two*.

The vowel-signs for the vowels, *au*, *uh*, and *oo*, it will be seen, lean to the left, as word-signs for one word, and to the right as word-signs for another word.

Several other word-signs are made by simply placing the breathing to the vowel and diphthong word-signs; these are .. *he*; .. *hay*; ^ *haw*; • *ho!* *hoe*; .. *hand*; ^ *high*; ^ *hoy*.

CHAPTER VI.

OF THE DIFFERENT FORMS OF THE CONSONANT-SIGNS FOR *S* AND *Z*, AND OF THE MODE OF WRITING THEM.

T A B L E.

○ *s*○ *z*○ *sis*, or *ses*.○ ^{*siz* or *ziz*}
_{*sez* or *zez*}EXPLANATION OF THE FORMS FOR *S* AND *Z*.

72. The *s* and *z* are consonant elements of very frequent recurrence, and it has been found convenient to adopt different methods of representing them under different circumstances.

The first or full forms are given in the alphabet, and the duplicates in the table above; the second forms are made by a small circle ○ one side of which is thickened a little for *z*; ○ as shown in the table above.

The circle is extremely useful because it helps very much to compress the writing into a small space, and because it offers the greatest facility for joining the other consonant-signs.

ON THE MODE OF JOINING THE CIRCLE TO THE
CONSONANT-SIGNS OF THE ALPHABET.

73. The sound *s* or *z*, for which the circle is used, may come, of course, either before or after that of the alphabetical-sign to which the circle is joined, as *sp* or *ps*, *sm* or *ms*, &c. In the first case the circle is made first and joined at the beginning, the hand turning the circle and then tracing the straight line or the curved alphabetical-sign, without any break or interruption between them; thus, \swarrow *s-p*; \swarrow *s-f*; \nearrow *s-ch*; \nwarrow *s-k*; in the second case, the circle is made last and joined at the end, by continuing the movement of the pen, after the alphabetical sign is completed; thus, \searrow *p-s*; \nwarrow *k-s*.

74. With respect to the side of the sign upon which the circle is made, three different cases must be distinguished.

I. That of the perpendicular and inclined straight-line-signs, when the circle is placed on the *right hand* side: they are the following; \swarrow *s-p*; \swarrow *s-b*; \uparrow *s-t*; \uparrow *s-d*; \nearrow *s-ch*; \nearrow *s-j*; and so with the *s* or *z* following; thus, \searrow *p-s*; (or *p-z*); \searrow *b-s*; \uparrow *t-s*; \uparrow *d-s*; \nearrow *ch-s*; and \nearrow *j-s*.

II. That of the horizontal straight-line-signs: here the circle is placed upon the upper side;

thus, $\text{— } s\text{-}k$; $\text{— } s\text{-}g$; and with the *s* or *z* following, $\text{— } k\text{-}s$; and $\text{— } g\text{-}s$, (or *z*.)

III. That of the curved-signs: with these the circle is always placed on the inner or concave side of the sign; thus, $\text{— } s\text{-}f$; $\text{— } s\text{-}v$; $\text{— } s\text{-}m$; $\text{— } s\text{-}th$; $\text{— } s\text{-}th$; $\text{— } s\text{-}s$; $\text{— } s\text{-}z$; $\text{— } s\text{-}l$; $\text{— } s\text{-}r$; $\text{— } s\text{-}n$; $\text{— } s\text{-}sh$; $\text{— } s\text{-}zh$; $\text{— } s\text{-}ng$; and with the *s* or *z* following; thus, $\text{— } f\text{-}s$; $\text{— } v\text{-}s$, &c.

75. When the circle comes between two consonant-signs it should be turned in the shortest way; thus, $\text{— } b\text{-}st$; $\text{— } ch\text{-}st$; $\text{— } k\text{-}st$; not $\text{— } \text{— } \text{— }$ which require the hand to move round a considerably greater distance; but if one of the other consonant characters is a curve, the circle must always be carried round upon the inner side of it; thus, $\text{— } m\text{-}st$; $\text{— } r\text{-}st$; and $\text{— } l\text{-}st$; not $\text{— } \text{— } \text{— }$ which would be awkward and difficult figures to make. Coming between other signs, the circle need not be formed with great accuracy.

METHODS OF WRITING THE VOWEL-SIGNS WITH THE DIFFERENT CONSONANT-SIGNS FOR *S* AND *Z*.

76. Six cases may be distinguished in which the two different methods of writing *s* and *z*, make it necessary to give particular directions

for placing the vowel-signs; three of them, in which the *s* or *z* is heard before the other consonant, and three in which the other consonant is heard first, as follows:—

I. The first case is when a vowel comes before an *s* or *z*, which is the *first* consonant in the word; thus, '⟩ *ease*; '⟩ *east*; '⟩ *haste*. Here the long sign must be written for the *s* or *z*, because we are compelled to place the vowel-sign to it, and the circle would not furnish the three positions necessary for distinguishing the local value of the dot and dash.

II. The second case is, when the vowel precedes two consonants, as before, the *last* of which is *s* or *z*; thus, '↖ *heaps*; '↖ *odds*; '↖ *aims*; here the circle is used, the vowel-sign being placed before the other sign.

III. The third case is that of a vowel coming *between* two consonants, the *first* of which is *s* or *z*; thus, '↖ *seat*; ↘ *seek*; ↘ *seem*; ↘ *seen*; ↘ *sag*; ↘ *sere*; ↘ *psalm*. In this case the circle is used, and the vowel-sign is placed to the other consonant-sign, just as it would be if that sign stood without the circle. The circle is then read first, though it seems to come after the vowel-sign; thus, '↖ is read *eat*, but if the circle is placed at the head of the long consonant, thus, '↖ the circle reads first,

and the word becomes *seat*. The attention of the student is specially directed to this case.

IV. The fourth case is, when a vowel comes between two consonants, as in the preceding case, the *last* of the two consonants being *s* or *z*; thus,  *pass*;  *boast*;  *moose*;  *roast*;  *face*.

Here the circle is used, and the vowel-sign is placed after the consonant-sign; the circle then seems to come before it, but must be read last. In this, and the preceding case, the general rule for placing the vowel-signs is sacrificed to the great convenience of the circle. (62).

V. The fifth case is that of the vowel coming after two consonants, of which *s* or *z* is the first; thus,  *stay*;  *snow*. Here the circle is used, the vowel-sign coming after the long consonant-sign.

VI. The sixth case is that of a vowel following an *s* or *z*, which is the last or only consonant in a word; thus,  *busy*;  *rosy*;  *sea*. Here the long sign must be used, for the same reason as in the first case, that is, because the vowel-sign must be placed to it, which cannot be done to the circle.

Words with no other consonant in them, but *s* or *z*, and a vowel both before and after it, come under both the first and sixth rules, that

is, the long sign) is used; thus) *easy*;)- *essay*.

77. There is one other case of rare occurrence, which needs, however, to be explained, viz.:— when two distinct vowel-sounds come between two consonants, one of which is *s* or *z*, as in the words *Zoology*, *Zoar*, *Boas*, *Saying*, &c. Here either the long sign or the circle may be used; if the long sign is chosen, the vowels are written as in other cases, one to each consonant-sign; thus,) Zoar;) Boas;) Saying. (63.) If the circle is preferred, both vowels must be placed to the other sign, and, in that case, if the circle is at the *beginning*, the *first vowel*, and, if at the *end*, the *second vowel-sign* must be placed a little further off than usual, while the other vowel undergoes no change of position; thus,) Zoar;) Boas.

NOTE.—The sounds represented in heterography, by the letter *x*, are written, in Phonography, as *ks* or *gz*; thus, the word *exercise* is) and *exact* is)

OF THE CIRCLE AS A WORD-SIGN.

78. The *z* circle is used as a word-sign for *is*, placed above the line; thus, °; and for *as*, placed on the line; thus, o; with the aspirate before it, it reads *his*, above; thus, '°; and *has*,

on the line; thus,  The aspirate may be omitted without any danger of ambiguity.

The circle, when it is not joined to another consonant-sign, is made by carrying the pen around in the direction in which the hands of a clock move; this brings the heavy part of the *z* circle on the right hand side.

OF THE *S* AND *Z* SOUNDS REPEATED.

79. When the sound of *s* or *z* is repeated in a word, with a vowel sound coming between them, as in *sauce*, (the *c* here sounds like *s*,) *cease*, *necessary*, *Moses*, *pieces*, &c., there are, of course, two modes of joining the circle to the regular form of the *s* or *z*, which are equivalent to each other; thus, for example,  and  will both read *s-s*. The writer, therefore, has a choice, according as one or the other mode is most convenient, but it will be well to keep the form  for *s-s*, and  for *s-z*. The former may then be vocalized into *sauce*, *cease*, *Swiss*, &c., and the latter into *says*, *size*, *sues*, &c.

The regular mode of writing the vowel-sign, to read between these two consonants, is the same as it is when the circle is joined to any other sign of the alphabet, as has been explained in the former part of this chapter. (76.)

But, besides this, it is often found very convenient, in rapid writing, when the vowel coming between these two consonant-sounds is merely the first or second stopped vowel (*i* or *e*) to represent the entire syllable, *sis*, *ses*, *cis* or *ces*, by the circle alone, made twice the usual size; thus, \circ *thesis*; \circ *pieces*; \circ *Moses*.

These syllables have a great variety of pronunciation in different words, as *sis*, *siz*, *zis*, *ziz*, *ses*, *sez*, *zes*, *zez*, but the difference in their sound is so slight that no difficulty, in reading, results from representing them all by one sign.

If one of the sounds in the combination is that of *z*, one side of the circle, as is most convenient in writing, may be made heavy, to indicate it.

CHAPTER VII.

PECULIAR FORMS AND METHODS OF WRITING
SOME OF THE CONSONANT AND VOWEL-SIGNS,
WITH GENERAL DIRECTIONS FOR PROMOTING
THE ELEGANCE OF THE HAND-WRITING.

OF CONSONANT-SIGNS WHICH ARE MADE UPWARDS.

81. To prevent words from running too far below the line, as well as to give some variety of forms, it is provided that several signs, inclined to the left, (the direction in which the line of writing proceeds) may, when convenience requires it, be made by striking them upwards, instead of downwards, as follows:

81. There is a second form for the sign of the very common sound *r*, which is a straight line leaning to the right, thus \swarrow . This sign is the same as that which occurs in the alphabet for *ch*; but this form of the *r* is *always made upwards*, and the *ch* always *downwards*, and the direction in which the sign is made is shown by its connection with other consonant-signs; thus, \swarrow is *ch-t*, and \nearrow is *r-t*, and \searrow is *p-ch*, and \nwarrow is *p-r*, &c.; the point of beginning, in one case, being at the top, and, in the other, at the bottom. The joining takes place as usual

at the end of the first sign, thus producing a marked difference in the skeletons of the words, by which means the sign for *ch* is readily distinguished from that for *r*. When the sign / stands *alone*, or with the *circle only* joined to it, it will always be read as *ch*; thus, / *each*; / *chew*; / *cheese*; / ^o *such*, &c.

82. These considerations as to the manner of reading this sign, will direct the learner as to the form which it is proper to use for the *r*, in writing. In most instances there may be a choice of signs, but if there is no other alphabetic or long consonant-sign to be used in connection with the sign for *r*, the up-stroke cannot of course be used.

83. The / *l*; / *sh*; and / *zh*, are made *upwards* or *downwards* at convenience, without any change of form, and *the direction in which they were made* will be known, in reading, as in the other case, by the connection with other consonant-signs; thus, / is *l-ng*, the / being made downwards; and / is *l-ng*, the / being made upwards. So / and / *sh-p*; / and / *r-zh* (in the word *rouge*). It is never *necessary* to make the heavy stroke upwards, and it will be found inconvenient, except when writing with a pencil.

84. When standing alone, or with the circle

s only, the *l* must always be struck *upwards*, and the *sh*, and *zh*, always *downwards*. The necessity of establishing a rule in these cases, will be shown by the following observations on placing the vowel-signs.

DIRECTIONS FOR PLACING THE VOWEL-SIGNS TO THE CONSONANT-SIGNS DESCRIBED ABOVE.

85. The places of the vowel-signs are reckoned from the point at which we commence to write the consonant-sign. This is the general rule applicable to all the signs. It follows, therefore, as respects those consonant-signs which are struck upwards, that the first-place vowel-signs are written at the bottom (which is the beginning) of the sign, the second-place at the middle, and the third-place at the top of the consonant-sign. In other words, the vowel-points proceed in the direction in which the hand moves in making the consonant-signs; thus \nearrow is *right*; \nwarrow is *poor*; \swarrow is *far*, &c. This method of placing the vowel-sign requires particular attention, as the same vowel-sign may appear at the opposite extremities of the consonant-sign, according as it is struck upwards or downwards, thus, \smile and \frown are two different methods of writing the word, *long*.

86. When the \swarrow stands alone, or with the circle only joined to it, as it is understood in that case to be made upwards (84), the vowel-signs are numbered from the bottom, upwards; while with \smile and \frown under the same circumstances, they are numbered downwards (84); thus, \smile is *law*; $\smile\circ$ is *Saul*; $\smile\circ\circ$ is *loss*; and $\frown\circ$ is *loose*; while \frown is *she*; $\frown\circ$ is *shy*; $\frown\circ\circ$ is *shoe*, &c. With the alphabetic form of the *r*, the vowels are of course numbered downwards; thus, $\smile\circ$ is *raw*; $\smile\circ\circ$ is *rise*; $\smile\circ\circ\circ$ is *sire*, &c.

OF THE SECOND FORM OF THE SIGN FOR THE BREATHING.

87. The breathing, *h*, is represented, as before explained, by a small dot placed before a vowel sign, (52); but, when more convenient, which is the case especially when there is no other consonant in the word, it may be written by the sign (; thus, (*hay*; (*Hugh*; (*aha*; (*Ohio*. This sign for the *breathing* is seldom required. It is made according to the general rule for perpendicular signs, from the top downwards, and the vowel-signs are numbered accordingly.

RULES FOR ADJUSTING THE POSITION OF THE CONSONANT-SIGNS TO THE LINE OF WRITING.

88. The line of writing is supposed to occupy, upon the paper, a space equal to the length of the signs; for example,



but by joining the different consonant-signs together, some of them will run below or above the space occupied by the line of writing to some extent, and the following directions should be observed to keep the writing in its proper place and contribute to the elegance of its appearance. The first perpendicular or inclined consonant-sign, *which occurs in a word*, should have its lower end upon the lower line of the space, and the position of the following signs will be determined by it. The rule is the same whether the sign is struck downwards or upwards; thus, \sqcap *top*; \sqcup *deck*; \sqsupset *cut*; \sqsupset *peach*; \swarrow *rope*, &c. The perpendicular signs will then reach from the upper to the lower line of the space, but the inclined signs being of the same length as the perpendicular ones, will, of course, not reach to the upper line. One exception, how-

ever, must be made to this last rule. When one of the upstroke-signs / / or \ is followed by a perpendicular sign, the eye is better pleased by lengthening the up-stroke so as to strike the upper line of the space, preserving, however, the same angle or curve; thus, / / are better than \ \ for the words *right* and *light*.

89. It should be observed that when the up-stroke *r* or the *l* struck upwards, is followed by the sign for *ch*, *j*, *sh*, or *zh*, the signs thus brought together would properly have the same inclination. To avoid an interference between the signs which would result from this circumstance, the up-strokes must be a little more than usually inclined; thus, / *reach*; / *ridge*; / *lash*.

90. It will be observed that the horizontals do not at all fill the space of the writing. Advantage may be taken of this circumstance when they are joined to no other consonant-sign, or merely to the circle, *s* or *z*, or to another horizontal, to determine by their position the nature of the vowel which belongs to the word; thus, if it is a first-place vowel, the horizontal-sign should be written at the *top* of the space, and, if it is a second or third-place vowel, at the bottom; thus — *key*; — *ache*; ~ *mass*; ~ *nine*, &c. It would be difficult to distinguish

three positions with the horizontals, and, therefore, the sign with a second-place vowel is also brought down to the line. By this means, if at any time the writer should omit the vowel-sign, the reader would be aided by the position of the consonant-sign. This method of placing the horizontals is regarded as pertaining rather to the elegance of writing, than as essential to correctness, but, for the advantage which it offers, as well as to preserve uniformity, it is better that the learner should at once form the habit of observing it.

CHAPTER VIII.

OF THE FIRST SERIES OF IMPROPER DIPHTHONGS;
AND OF THE TRIPHTHONGS.

TABLE.

FIRST GROUP.

SECOND GROUP.

	<i>Full.</i>	<i>Stopped.</i>		<i>Full.</i>	<i>Stopped.</i>
<i>1st place,</i>	‘	‘	<i>1st place,</i>	›	›
<i>2nd place,</i>	‘	‘	<i>2nd place,</i>	› 3	›
<i>3rd place,</i>	‘	‘	<i>3rd place,</i>	›	›

IMPROPER TRIPHTHONGS.

<i>1st place,</i>	L
<i>2nd place,</i>	
<i>3rd place,</i>	7

EXPLANATION OF THE IMPROPER DIPHTHONGS AND DIPHTHONG-SIGNS OF THE FIRST SERIES.

91. There are two series of improper diphthongs. Those of the first series are precisely those combinations of sounds which are commonly represented by prefixing the letter *w* to the simple vowels. The full diphthongs of this series are, therefore, *we*, *wa*, *wah*, *wau*, *wuh*, *wo*, *woo*; as in the words, *we*, *way*, *waft*,

wall, work, woke, wooed; and the stopped, are *wě, wă, wăh, waă, wăh, wăo*; as in the words *wit, wet, wag, was, one, wood*.

92. The signs by which the improper diphthongs are represented, are small half circles, occupying the first, second, and third places, opposite the consonant-signs, like the simple vowel-signs.

For the first series, the half circles are made by dividing the circle perpendicularly. The first, or left-hand half of the circle, (corresponding to the mark made at the beginning of a parenthesis) is then used in the three positions, for the first group of this series of compound vowels, *heavy* for the *full*; thus,  *weep*;  *wait*;  *waft*; and the same figure made with a lighter or thinner line for the corresponding *stopped* sounds; thus,  *will*;  *wed*;  *wag*.

The second half of the circle, (corresponding to the line which is made at the end of a parenthesis) is used for the second group of the same series of compound vowels, *heavy* for the *full*; thus,  *wall*;  *work*;  *wooed*; and lighter for the stopped vowels corresponding; thus,  *was*;  *one*;  *wood*. This sign is doubled and written at the second place for *wo*; thus,  *woke*;  *woes*.

These figures should always be made as small as they can be formed conveniently with a pen or pencil, and so much curved as to be half circles, instead of quarter circles like the consonant-signs. They, as well as the proper diphthong-signs, must always retain their own position, without regard to the inclination of the consonant-signs; thus, we write \nwarrow *weep*; $\underline{\text{e}}$ *week*; \swarrow *wage*; and not $\text{e} \underline{\text{w}}$ \swarrow

The signs for the second series will be described in the following chapter.

93. It will be observed that the signs placed in the alphabet, for these ambiguous consonants have a local value, and are not merely equivalent to *w* and *y*, but represent *we*, *wa*, *wah*, *ye*, *ya*, *yah*, &c., according to the position which they occupy.

EXPLANATION OF THE IMPROPER TRIPHTHONGS AND TRIPHTHONG-SIGNS.

94. There are two triphthongs in our language, both of which are improper triphthongs. They are the combinations of sounds which may be represented by placing the *w* before the proper diphthongs *i* and *ou*. (53.)

95. The signs employed in phonography for these compound sounds, are formed by divid-

ing a small square, by a diagonal line inclined from left to right; thus, ☐ The first half of the square so divided, is then used for the first of the compound sounds, and placed in the first position opposite the consonant-sign; thus, ☐ *wind*; and the second half is used for the second of the two sounds, and placed at the third position; thus, ☐ *wound*.

OF THE BREATHING BEFORE THE FIRST SERIES OF IMPROPER DIPHTHONGS AND THE TRIPHTHONGS.

96. There is a large class of words in our language which commence by a combination of sounds, represented in the old orthography by *wh*, as *when*, *where*, *which*, *why*, *while*, &c. This mode of writing is a complete inversion of the order in which the sounds are heard, the breathing (*h*) being first uttered, and the *w* afterwards; thus, *hoo-ere*, *hoo-en*, *hoo-ich*, *hoo-i*, *hoo-ile*. These sounds are therefore represented in phonography, by placing the small dot before the diphthong or triphthong-sign; thus, ☐ *where*; ☐ *when*; ☐ *which*; ☐ *why*, &c.

IMPROPER DIPHTHONG-SIGNS OF THE FIRST SERIES
AND THE TRIPHTHONG-SIGNS USED AS WORD-SIGNS.

DIPHTHONG-SIGNS.

FIRST GROUP.

Full.

1st place, \leftarrow we.
2nd place,
3rd place, \leftarrow were ; \leftarrow where.

Stopped.

\leftarrow with.

SECOND GROUP.

1st place,
2nd place,
3rd place,

\rightarrow what.
 \rightarrow would.

TRIPHTHONG-SIGNS.

1st place, \leftarrow why.
2nd place,
3rd place,

The second-place diphthong-signs are, like the simple vowel-signs, brought down to the third-place, when used as word-signs. The word-signs formed by prefixing the breathing, are inserted in the tables.

CHAPTER IX.

OF THE SECOND SERIES OF IMPROPER DIPHTHONGS AND DIPHTHONG-SIGNS.

TABLE.

FIRST GROUP.		SECOND GROUP.	
<i>Full. Stopped.</i>		<i>Full. Stopped.</i>	
<i>1st place,</i>	^	<i>1st place,</i>	^
<i>2nd place,</i>	^	<i>2nd place,</i>	^
<i>3rd place,</i>	^	<i>3rd place,</i>	^

EXPLANATION OF THE IMPROPER DIPHTHONGS, AND DIPHTHONG-SIGNS OF THE SECOND SERIES.

97. The second series of improper diphthongs, are those sounds which are represented by prefixing the letter *y* to the simple vowels. The full diphthongs of this series are, therefore, *ye, ya, yah, yau, yuh, yo, yoo*,* as in the words, *ye, yea, yard, yawn, yearn, yoke, you*; and the stopped are *yē, yă, yăh, yău, yăh, yōo*, as in the words *yis* (yes), *yet*, *yam*, *yon*, *young*. The last stopped diphthong of the series, is not used in the English language.

* The last full diphthong of the series, is the compound-sound represented by *u* in *universe*, and is likewise the vowel-sound heard in *few, community, &c.*, in which words the weak consonant-sound of *y* should be distinctly uttered, which is not always the case in America.

To furnish signs for these sounds the circle is divided horizontally; thus, \circ . The lower half of the circle is then used for the first group; thus, full, J *yield*; Y *Yale*; A *yard*; stopped, v *yis* (yes); U *yet*; ~ *yam*.

The upper half of the circle is used for the second group, doubling it for *yo*; thus, full, ~ *yawn*; ~ *yearn*; ~ *yoke*; ~ (*youth*; stopped, ~ *yon*; ~ *young*). The stopped sounds corresponding to *yo* and *yoo* do not occur in the English language.

The last of the full series, (*yoo*) is the long sound of *u* heard in *youth*, *your*, *union*, and also in *few*, *tune*, *community*, &c.

The sign for it is a word-sign for the word *your*, and is the only word-sign of this series.

OF THE IMPROPER DIPHTHONGS AND TRIPHTHONGS.

99. *Improper diphthongs*, like *proper diphthongs*, are likewise a species of transition sounds, beginning with one vowel and ending with another; but with this peculiarity, that, while the organs are passing from one position to the other, they come so near a contact as to give rise to a weak consonant-sound which differs from any other of the consonant elements.

In this manner two new consonants are generated, which are represented in the printing alphabet by the *W* and *X*. They are the weakest of the consonant-sounds, except the breathing, and are classed along with it under the name of *ambigues* (*see alphabet*, p. 18). There are two classes of these improper diphthongs. They are produced by pre-

fixing the seventh simple vowel (*oo*), and the first simple vowel (*e*) to any of the simple vowels; thus, if one attempts to say *oo-a*, *oo-ah*, &c., and pronounces them with some rapidity for several times in succession, he will say *wa*, *wah*, &c. In the same manner *e-a*, *e-ah*, will produce *ya*, *yah*. There are three methods by which we might represent the improper diphthongs; I. By writing both the vowels thus, *oo-a*, *oo-ah*, &c.; II. By representing the first simple vowel by the sign for the consonant (*W* or *Y*), into which it is partially converted; this we do in printing; III. By employing a single sign for the entire diphthong. This last method is adopted in Phonography, on account of its conciseness.

100. The learner must guard against supposing that there are two new sets of vowels, distinct from the simple vowels, to be learned. By merely prefixing the seventh vowel *oo* to the whole of the first and second order of the simple vowels *full* and *stopped*, he will have the first series of improper diphthongs, *full* and *stopped*, and by prefixing the first vowel *e* in the same manner, he will have the second series. The first series of improper diphthongs may be analysed as follows:—

FIRST GROUP.

<i>Full.</i>		<i>Stopped.</i>
<i>oo-e</i>	equivalent to <i>we</i> .	<i>oo-ě</i> equivalent to <i>wě</i> . (91.)
<i>oo-a</i>	" <i>wa</i> .	<i>oo-ă</i> " <i>wă</i> .
<i>oo-ah</i>	" <i>wah</i> .	<i>oo-ăh</i> " <i>wăh</i> .

SECOND GROUP.

<i>Full.</i>		<i>Stopped.</i>
<i>oo-au</i>	equivalent to <i>wau</i> .	<i>oo-ău</i> equivalent to <i>wău</i> .
<i>oo-uh</i>	" <i>wuh</i> .	<i>oo-ăh</i> " <i>wăh</i> .
<i>oo-o</i>	" <i>wo</i> .	
<i>oo-oo</i>	" <i>woo</i> .	<i>oo-ăo</i> " <i>wăo</i> .

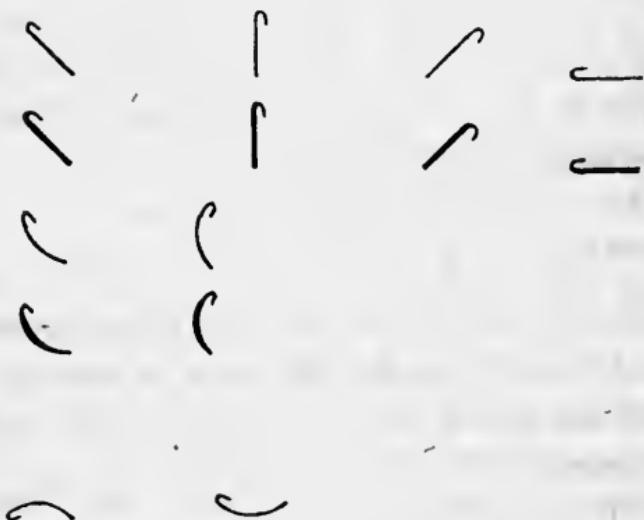
The second series may be analysed in the same manner into *e-e*, *e-a*, *e-ah*, &c., equivalent to *ye*, *ya*, *yah*, &c.

101. The triphthongs are composed of the seventh vowel *oo*, followed by *i* and *ou*, which are proper diphthongs; thus, *oo-i*, *oo-ou*, are equivalent to *wi*, *wou*.

CHAPTER X.

OF THE *L*-HOOK SERIES OF SIGNS.

TABLE.

EXPLANATION OF THE DOUBLE CONSONANTS AND
OF THE *L*-HOOK.

102. The two liquids, *l* and *r*, are found to unite very intimately with the other consonants in a great number of words, forming a kind of double sound, pronounced by a single effort of the voice; thus, in the words *play* and *pray*, the two sounds, represented by *p* and *l*, and by *p* and *r*, seem to become actually *one*.

The first liquid, *l*, uttered in this compound manner, immediately after, and in combination with another consonant element, *with no vowel coming between them*, is represented by merely adding a small hook at the beginning of the consonant-sign, by which the other element is written. The *hook* is made *first* in writing the compound sign, and, in all cases, is joined to the stroke at the beginning, on the same side as the circle *s* (73); thus, \nwarrow *pl*; \swarrow *kl*; \curvearrowleft *ml*; \curvearrowleft *nl*, &c.

103. The *l-hook*, though made at the beginning of the alphabetical sign, is not read *before* it, like the circle *s*, made at the same place, but *after* it, that is to say, the consonant-sign to which it is affixed is always read *first*, as *pl*, *kl*, *ml*, &c. Hence the combinations *lp*, *lk*, *lm*, *ln*, &c., must be written in full; thus, \nwarrow \swarrow \curvearrowleft \curvearrowleft \curvearrowleft as in the words, \nwarrow *help*; \swarrow *like*; \curvearrowleft *limb*; \curvearrowleft *line*. This peculiarity should be well fixed in the mind of the learner.

104. The consonant-signs, \circ \circ \swarrow \swarrow and \curvearrowleft never take the *l-hook*, either because there is no occasion for such combinations of sounds, or else, because there are already provided other methods of representing them sufficiently contracted.

Sl and *zl* are written thus, \curvearrowleft \curvearrowleft as in \curvearrowleft *seal*;

.6 *zeal* (84), or in combination, they may be written thus $\check{\wedge}$ as in $\check{\wedge} \text{ excel}$, (83) that is, instead of putting an *l-hook* to the long) *s* or) *z*, the circle is placed to the full sign for *l*; *ll* and *ngl*, are not required; *rl* is written in full; thus $\check{\vee}$ or else by special forms which are explained in a following chapter. *Shl* and *zhl* have also peculiar forms which are not yet introduced. (115.)

OF THE MODE OF PLACING THE VOWEL-SIGNS TO
THE *L*-HOOK SERIES OF SIGNS.

105. The alphabetic-sign, with the hook added to it, should be regarded as *one sign*, and the two consonants represented by it, should, in analysing words, be named as *one*; that is, the sounds represented by the signs of the *l*-hook series should be pronounced as the final syllables of the words, *apple* (pl), *bible* (bl), *title* (tl), *meddle* (dl), *whiffle* (fl), *evil* (vl), &c.

In writing, therefore, if a vowel precedes this double consonant-sound, the vowel-sign must be placed *before* the double consonant-sign; thus, $\check{\wedge}$ *apple*; $\check{\wedge}$ *evil*; $\check{\wedge}$ *eagle*, &c., and if the vowel follows, the vowel-sign must be placed *after*; thus, $\check{\wedge}$ *play*; $\check{\wedge}$ *flying*; $\check{\wedge}$ *clay*, &c., or a vowel-sign may be placed on both sides; thus, $\check{\wedge}$ *only*, the two consonants still being uttered together.

But if a vowel has to be inserted *between* two consonants, the last of which is *l*, each consonant must be written by its own proper alphabetic sign; thus,  *peal*;  *fail*;  *mail*; and, in analysing, each element must then be named separately.

Even when the two consonant sounds are uttered as one, they nevertheless form *a syllable* at the end of a word, and we hear between them a very slight quantity of the natural vowel, No. 5, the sign for which is omitted when the hook is used. (50.) But if great accuracy is desired, in denoting the elements of the word, both consonants may be represented by their own signs, and the fifth full-vowel-sign inserted; thus,  *apple*;  *evil*, &c.

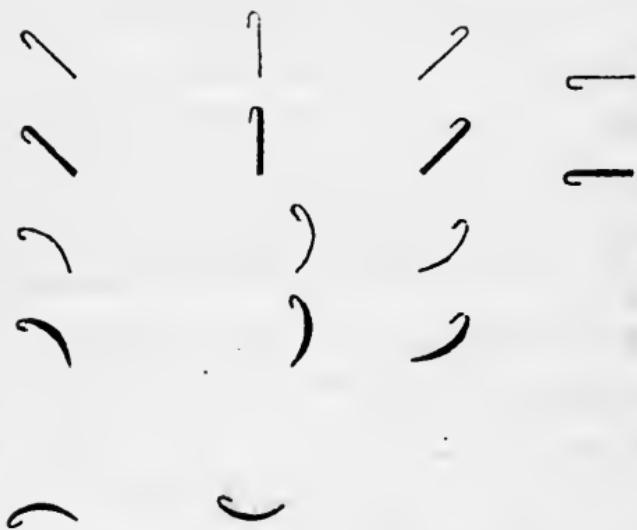
SIGNS OF THE L-HOOK SERIES USED AS WORD-SIGNS.

The signs of this series, used as word-signs, are  for *public*;  above the line, for *knowledge* and *acknowledge*; and  on the line for *only*;  for *follow*; and  for *individual*.

CHAPTER XI.

OF THE *R* HOOK SERIES OF SIGNS.

TABLE.

EXPLANATION OF THE *R*-HOOK.

106. The second liquid, *r*, when it follows another consonant, is likewise represented by a small hook at the beginning of the alphabetical sign, by which the other consonant is signified, but upon the side opposite that upon which the *l-hook* is placed; thus, \nwarrow *pr*; \uparrow *tr*; \nearrow *chr*; — *kr*, &c. A difficulty occurs here, however, with respect to some of the curved letters. A hook must not be placed upon the back of a curve, as it would make an awkward and

troublesome figure to write. To obviate this necessity, the signs, \backslash *f*, \backslash *v*, (*th*, and (*th*, when the *r* hook is added, are *themselves* inverted, making \backslash *fr*, \backslash *vr*,) *thr*,) *thr*, as in the words, \backslash *free*; \backslash *over*;) *ether*;) *either*. This is done without occasioning any confusion, because the signs, \backslash) and) the places of which they are thus made to occupy, do not take the *r*-hook when they are used for *r*, *s*, and *z*. This method cannot be used with the *m* and *n* signs. The *body* of the sign is therefore made heavy when the *r*-hook is added.

The combination *rr* is not required. *Sr* and *zr* are written thus \backslash \backslash as in the words \backslash *sire*; \backslash *sour*; \backslash *sorry*.

OF THE METHOD OF WRITING THE VOWEL-SIGNS TO THE *R*-HOOK SERIES OF CONSONANT-SIGNS.

107. The method of writing the vowel-signs to this series of signs, is in all respects the same as that described in the preceding chapter, with reference to the *l*-hook, and the same observations are applicable. (105.) When uttered as *one*, the consonants of this series should be named as the last syllables of the words, *paper* (*pr*), *robber* (*br*), *letter* (*tr*), *reader* (*dr*), &c.

ON JOINING THE *L* OR *R*-HOOK-SIGNS TO A PRECEDING CONSONANT-SIGN.

108. The *l* or *r*-hook-signs are readily joined to a preceding consonant-sign, without raising the pen, as  *reply*;  *surprise*;  *noble*;  *tickle*, &c. In a few instances the hook may not be very perfect, as  *cradle*;  *degree*, but the offset made by the pen renders it equally obvious. It must not in any case have the appearance of being *mended on*, as   &c.

When the circle comes between a preceding consonant-sign, and a hook-sign, it must be turned so as to accommodate it to the formation of the hook; thus,  *express*;  *master*;  *physical*;  *explain*;  *describe*.

In some cases of this kind it is more distinct to write the two single signs at length, instead of the hook-sign; thus,   *describe*;   *explain*.

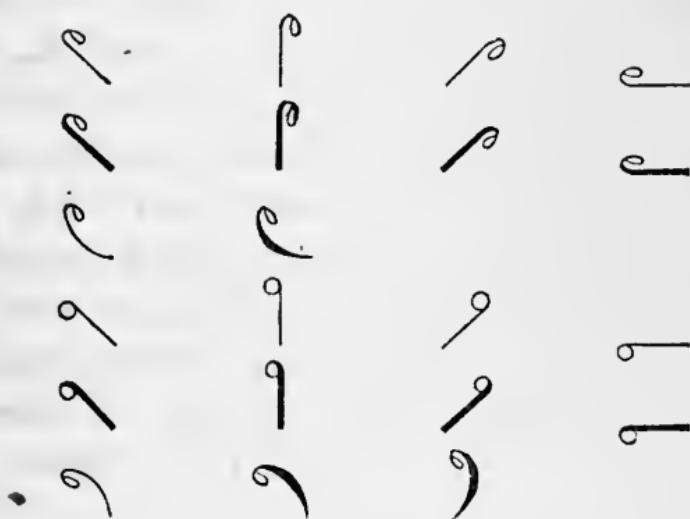
SIGNS OF THE *R*-HOOK SERIES USED AS WORD-SIGNS.

109. The signs of this series used as word-signs, are  for *principle* and *principal*;  for *member* and *remember*;  for *from*;  for *very*;  above the line for *remark*; and  on the line for *more*;  for *truth*;  for *there* and *their*; and  above the line for *nor*; and  for *pleasure*.

CHAPTER XII.

OF THE *L* AND *R*-HOOK SERIES OF SIGNS PRECEDED BY *S*.

TABLE.



EXPLANATION OF THE COMBINATIONS.

110. The circle is prefixed to the double consonant-signs, as well as to the single. It is joined to the *l*-hook series by making it rather smaller than usual, and including it within the hook; thus, *spl*; *skl*; *srl*; in this case the circle is made first, and the hand, in turning it, is carried round so as to form the hook before making the long sign, which is struck last.

111. The *s* or *z* is prefixed to the *r*-hook series of consonants in rather a different manner. The circle for *s* or *z*, and the *l*-hook, occupy the same side of the alphabetical sign ; thus $\textcircumflex sp$; $\textcircumflex pl$; and hence, when both the hook and circle are needed, pains must be taken, as in the first part of the above table, to make them both obvious ; but as the circle for the simple *s* or *z* is never placed upon the side of an *r*-hook, advantage is taken of this circumstance to represent both the circle and hook by writing the circle alone, the position which it occupies indicating the double office which it performs ; thus \textcircumflex is *spr* ; \textcircumflex is *str* ; as contracted forms for $\textcircumflex \textcircumflex$ &c. But, with the curves, the contraction cannot take place ; thus, we must write \textcircumflex for *suffer*, &c.

RULES FOR PLACING THE VOWEL-SIGNS TO THE *L*
AND *R*-HOOK SIGNS PRECEDED BY THE CIRCLE.

112. The learner will notice that in these combinations the *s* sound is heard first, and the liquid *l* or *r* last of the three consonant-sounds which are thus united. Inasmuch as the *s* sound is first heard, it follows that no vowel-sound can be so written as to read before one of these signs (because a vowel cannot be writ-

ten to the circle); hence, if a word begins with a vowel, followed by one of these combinations of sounds, the long *s* must be used, thus, $\overset{\wedge}{\text{y}}$ *oysters*; $\overset{\wedge}{\text{y}}$. *hist'ry*.

If a vowel comes after the *s*, and before the *pl*, *pr*, &c., the circle is then used as directed above, and the vowel written *before*, that is, on the *left hand of* the perpendicular and inclined consonant-signs, and *above* the horizontals; thus, $\overset{\wedge}{\text{P}}$ is read *sidle*, and $\overset{\wedge}{\text{q}}$ *cider*; just as $\overset{\wedge}{\text{P}}$ is read *side*. In the same manner we may compare $\overset{\wedge}{\text{f}}$ *saddle*, $\overset{\wedge}{\text{g}}$ *sadder*, and $\overset{\wedge}{\text{f}}$ *sad*; $\overset{\wedge}{\text{e}}$ *sickle*, $\overset{\wedge}{\text{e}}$ *sicker*, and $\overset{\wedge}{\text{e}}$ *sick*; $\overset{\wedge}{\text{v}}$ *similar*, $\overset{\wedge}{\text{v}}$ *simmer*, and $\overset{\wedge}{\text{v}}$ *Simms*; $\overset{\wedge}{\text{c}}$ *civil* $\overset{\wedge}{\text{v}}$ *suffer*, and $\overset{\wedge}{\text{L}}$ *safe*, &c.

113. If the vowel comes after all the three consonant-sounds, it must be written after; that is, to the right hand, or below the sign; thus, $\overset{\wedge}{\text{e}}$ *splice*, $\overset{\wedge}{\text{e}}$ *spy*, just as $\overset{\wedge}{\text{e}}$ is *spice*, and $\overset{\wedge}{\text{e}}$ is *spy*; compare in the same manner, $\overset{\wedge}{\text{L}}$ *stream*, $\overset{\wedge}{\text{L}}$ *steam*; $\overset{\wedge}{\text{v}}$ *skream*, $\overset{\wedge}{\text{v}}$ *scheme*; and the like.

When no vowel comes between the consonants, *s-pl*, *s-pr*, *s-tl*, *s-tr*, &c., these combinations are read as *one*, in analysing words, like the *pl*, *pr*, &c.

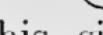
CHAPTER XIII.

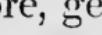
PECULIAR COMPOUND CONSONANT-SIGNS.

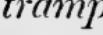
114. The up-stroke *r* takes an *l*-hook upon the left side; thus,  which may appear, at first, to be contrary to analogy; but if this form of the *r* is regarded as the — *k*, with the end elevated to an angle of forty-five degrees, the arrangement of the hook will be seen to be correct; thus,  *pearl*;  *curl*;  *furl*, &c. This form, like the simple up-stroke, can only be used in combination; hence,  *reel*,  *rally*, and similar words must be written at length.

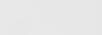
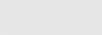
115. The signs *shl*, and *zhl*, are joined by the hook to the end of the preceding consonant-sign, and are struck up; thus,  *partial*;  *essential*, &c. As they have this peculiarity, they were not inserted in the table of the *l*-hook characters, but reserved for a special explanation. The character for *zhl* being a heavy mark, *z* and struck up, cannot be easily made *with a pen*; but this combination is of very rare occurrence, and it may be written in full. We have an instance of it in the word  *ambrosial*.

116. There are two signs for the combination *lr*, one or the other of which is used, according as it is the more convenient form for

joining in the position in which it occurs. The first form is the *l* with a hook at the lower or beginning extremity; thus,  This sign is always struck up. It is joined, therefore, to a preceding sign by the hook, as in  *fuller*;  *sailor*. The *r*-hook of this sign is on the side opposite to that of the *l*-hook, upon the upstroke *r*.

117. The second sign for the combination is the *l* made heavy, which is, therefore, generally struck down; thus, as in  *sailor*;  *miller*.

The sign for *m*, made heavy, is used for *mp*; as in  *imp*;  *impious*;  *tramp*.

118. The alphabetic sign for *r*, made heavy, makes a second sign for *vr*, this form not being required for any other purpose; in other words, the hook for the *rr* character may be omitted, as in  *over*;  *clever*  *river*; instead of    &c.

THE PECULIAR COMPOUND CONSONANT-SIGNS USED AS WORD-SIGNS.

119. The  *lr* is used as a word-sign for *already*.

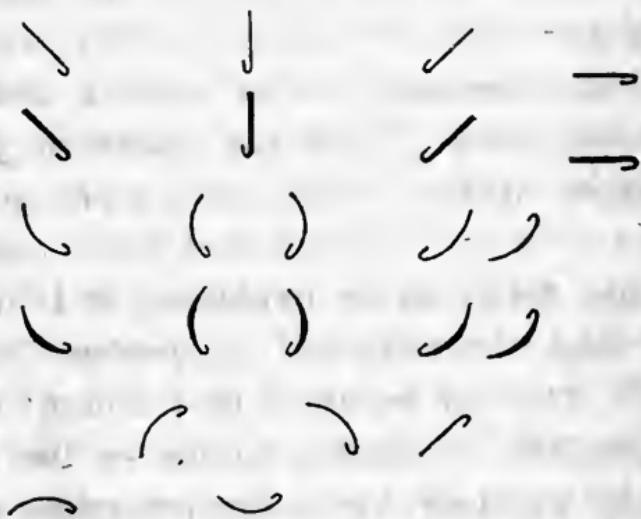
The  *mp* above the line, is used as a word-sign for *important* and *importance*, and  on the line, for *improve*, and *improvement*.

The  *vr* is a word-sign for *every*.

CHAPTER XIV.

OF TERMINATIONAL CHANGES AND PARTICULARLY
OF THE N-HOOK.

TABLE.

OF THE ADDITIONS AND CHANGES WHICH OCCUR AT
THE END OF THE CONSONANT-SIGNS.

120. The method has been explained in the preceding chapters of joining the simple circle for *s* and *z* to the alphabetic-signs; that of using the hooks for the liquids *l* and *r*; and, finally, that of joining the circle to the double signs, formed by the addition of the hooks.

All of these additions are made at the beginning of the consonant-signs. Other additions

and *changes* are made, for other purposes, at the end, which will be explained in this and the following chapters. The consonant-sounds, which are signified by hooks or changes made at the end of the alphabetic-sign, are, like the *s* or *z*, signified by the circle, (72) *distinct and single consonants*; that is, they do not blend in the utterance, like the liquids *l* and *r*, with the preceding consonant, so as to form a double consonant. (102.) These may, therefore, just as properly be written by their own separate signs. When represented in the contracted methods which are about to be explained, it is merely for the sake of *brevity* and *compactness* in writing. Hence, they separate, in reading, like the circle, as will be shown, whenever the vowel comes between *them* and the preceding single or double consonant. The rules for placing and reading the vowel-signs, along with consonant-signs thus modified, will be more fully stated after the several kinds of final changes have been specifically described. (141.)

OF THE *N*-HOOK.

121. This hook is placed at the end of the alphabetic-signs *upon the side which the r-hook occupies at the beginning*, as respects the straight-

line-signs ; but always upon the *inner* or *concave side* of the *curves* ; thus, $\curvearrowleft p\text{-}n$, $\curvearrowleft t\text{-}n$, $\curvearrowleft k\text{-}n$, and $\curvearrowleft f\text{-}n$, $\curvearrowleft r\text{-}n$, $\curvearrowleft l\text{-}n$, $\curvearrowleft m\text{-}n$, $\curvearrowleft n\text{-}n$, &c.

An *s* or *z* is then added at the end of words *only*, (for the plural of nouns, &c.), by merely carrying the hook round, so as to complete a circle *upon the straight signs* ; thus, $\circ p\text{-}ns$, as in the word *pence* ; $\circ p\text{-}nz$, as in *pains* ; $\circ d\text{-}ns$, as in *dense* ; $\circ d\text{-}nz$, as in *dens*, and turning or folding it *within the circle, upon the curves*, thus, $\curvearrowright m\text{-}nz$, as in *man's*. The circle may be made a little heavy for *z*.

122. The combinations, *sh-n* and *zh-hn*, have each two forms ; thus, $\curvearrowleft \curvearrowleft$ or $\curvearrowright \curvearrowright$ according as the sign is struck up or down. The first forms are the same as those for *sh-l*, and *zh-l*, (115) ; and the second the same as those for *sh-r*, and *zh-r*. (106.) They are easily distinguished, however, as the *sh-l* form is *joined to the preceding sign by the hook*, and then struck *upwards* ; and the *sh-r* is also *joined by the hook*, and then struck *downwards* ; while the *sh-n* form, whether struck *upwards* or *downwards* is always joined by the body of the sign, and the hook made last ; thus, compare, $\curvearrowleft \curvearrowright$ *essential*, $\curvearrowleft \curvearrowright$ *censure*, with $\curvearrowleft \curvearrowright$ or $\curvearrowright \curvearrowright$ *ascension*.

The *sh-n* and *zh-hn* forms can only be struck upwards when preceded by a long consonant-

sign, as they could not otherwise be distinguished from *sh-r* and *zh-r*. Struck downwards, they may stand alone, thus, \mathcal{S}^v *shine*; \mathcal{S} *shown*, &c., because the *sh-l* and *zh-l* forms are never used, except when preceded by a long consonant-sign.

123. The $\mathcal{L}n$, and $\mathcal{R}rn$, can only be used when in conjunction with other long signs, as they would be taken for *lr*, *chl*. The other forms must be used in such words as $\mathcal{L}line$; $\mathcal{R}rain$, &c.

124. The combinations of the *n*-hook series partake of the double consonant character, when no vowel intervenes, and they may then be named like the last syllables of the words *tympan* (pn), *turban* (bn), *martin* (tn), *sudden* (dn), &c.

The final *ns* circle may, as a convenient name, be called *ence* or *enz*. The double circle, *sis* or *siz*, is then called *ensis*, and is read thus, $\mathcal{D}tenses$, $\mathcal{D}expenses$.

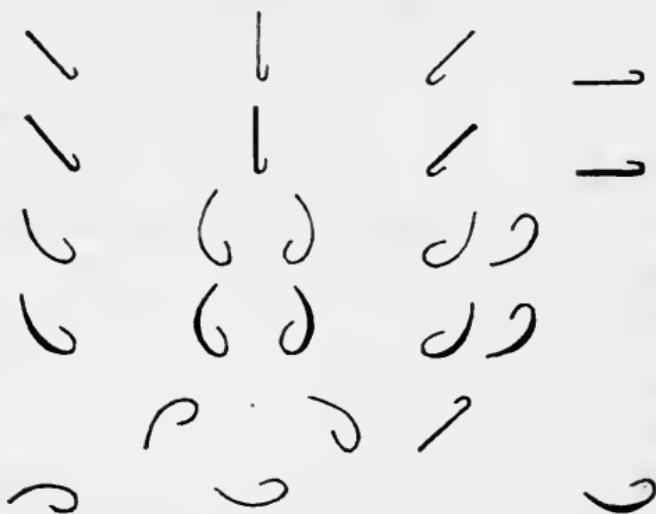
SIGNS OF THE *N*-HOOK SERIES USED AS WORD-SIGNS.

125. The sign \mathcal{N} is used for *upon*; \mathcal{N} for *been*; \mathcal{N} for *phonography* and *phonographic*; \mathcal{N} above the line, for *opinion*; \mathcal{N} for *general*; \mathcal{N} for *occasion*; \mathcal{J} for *done*; \mathcal{P} for *alone*; and \mathcal{M} on the line for *can*.

CHAPTER XV.

OF THE *SHN-HOOK*.

TABLE.

EXPLANATION OF THE *SHN-HOOK*.

126. There still remains one position only in which the hook may be placed to the alphabetical-signs which has not yet been employed. This is at the end of the straight-line-signs, upon the side which the *l-hook* occupies at the beginning. It is found convenient to use the hook in this position for the combination of sounds, *shn*, or *zhn*, which are heard in those very frequent terminations of the English lan-

guage, *tion*, *sion*, *cian*; thus, ↘ p-shn; ↙ d-shn; → k-shn, &c.

A final *s* or *z* is then added by turning the circle within the hook; thus, ↘ p-shns; ↙ d-shns; → k-shns.

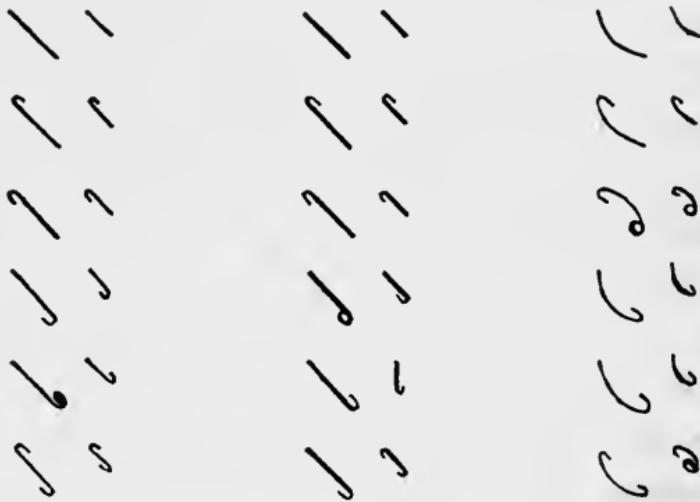
128. Inasmuch as the hook can only be placed on the inner or concave side of the curves, and as this position is already occupied by the *n-hook*, the termination *shn* or *zhn* is added to the curved-signs, by merely making the hook twice the usual size, and a small circle is added at the end of it for a final *s* or *z*; thus, ↘ f-shn, ↘ s-shn, ↘ n-shn, ↘ f-shns, ↘ s-shns, ↘ n-shns. The hook may be thickened a little for *zhn*; thus, ↘ v-zhn, ↗ d-r-zhn. It is frequently more convenient to write these terminations, when they follow curve-signs, by the full forms, ↘ ↘ or ↘ ↘

129. The sign → above the line, is used as a word-sign for *objection*, and is the only *shn* hook-sign used as a word-sign in ordinary writing.

CHAPTER XVI.

OF THE ADDITION OF *T* AND *D* BY HALVING THE LENGTH OF THE SIGNS.

TABLE.



EXPLANATION OF THE HALF-LENGTH SIGNS.

130. The *t* and *d* are sounds of very frequent occurrence, and are often added to other consonant-sounds, with or without the intervention of a vowel, particularly in the formation of the past tenses and perfect participles of the regular verbs. These two sounds are written in phonography by the perpendicular

straight line, which, when added to another sign, or repeated, would sometimes carry the writing below the line, so as to mar the beauty of its appearance. It is desirable, therefore, both for the sake of brevity and elegance, to have a contracted method of representing these two sounds. But every position at which the hook or the circle can be joined to the alphabetical signs, is already occupied. How, then, can the *t* and *d* be represented, without the necessity of writing them in full? This apparent difficulty is beautifully provided for in phonography, by recognising a difference between the full length signs of the alphabet, and the same signs written half their usual length.

131. By making the signs of the alphabet half length, we add, therefore, either *t* or *d* to their value; that is, the half length sign reads just as the full length sign, with a *t* or *d* added to it would read; thus, — half length, is the same as  By this means it often happens that a word of several syllables occupies less space in writing, than a monosyllable written in full length signs.

132. In order to determine whether it is the sound of *t* or *d*, which is added by the half length, the following rules must be observed:

I. The sound of *t* is added to the whispered

consonants, and that of *d* to the spoken consonants; in other words, *t*, if the sign is made by a light line, and *d*, if it is made by a heavy one; thus, $\nwarrow p\text{-}t$, $\nwarrow b\text{-}d$, $\nwarrow f\text{-}d$, $\nwarrow v\text{-}d$. This applies to all of the consonant alphabet, except the liquids, *l* and *r*, and the nasals, *m* *n* and *ng*, which are not distinguished into whispered and spoken.

II. With respect to the four signs, *l*, *r*, *m*, and *n*, the sound of *d* is added, if the half length sign is made *heavy*; thus, $\curvearrowleft l\text{-}d$, $\curvearrowleft r\text{-}d$, $\curvearrowleft m\text{-}d$, $\curvearrowleft n\text{-}d$; and that of *t*, if the half length sign remains *light*; thus, $\curvearrowleft l\text{-}t$, $\curvearrowleft r\text{-}t$, $\curvearrowleft m\text{-}t$, $\curvearrowleft n\text{-}t$.

III. There is no contracted form for *ng-t*, or *ng-d*, the sign \curvearrowleft half length and heavy, being used for *n-d*.

133. *S* or *z* is added to the half-signs by the circle, in the same manner as it is to the full length signs; thus, $\curvearrowleft p\text{-}ts$, $\curvearrowleft b\text{-}dz$, $\curvearrowleft m\text{-}ts$, $\curvearrowleft m\text{-}dz$, &c.

134. The same principle of adding the value of *t* or *d*, by halving the length, is extended likewise to the compound signs, whether they have a hook at one or both ends; thus, $\curvearrowleft pl\text{-}t$, $\curvearrowleft bl\text{-}d$, $\curvearrowleft kr\text{-}t$, $\curvearrowleft gr\text{-}d$; $\nwarrow pr\text{-}t$, $\nwarrow pl\text{-}nt$, $\nwarrow pr\text{-}nt$, $\nwarrow p\text{-}shnt$.

135. If there is a final hook, it may be thickened a little when *d* is added; thus, $\curvearrowleft p\text{-}nd$, $\curvearrowleft k\text{-}nd$, $\nwarrow pl\text{-}nd$.

136. The compound-signs,  *l*,  *mp*, and  *vr*, are not halved for these combinations; these signs, half length and heavy are used for *l-d*, *m-d*, and *r-d*.

The *l-t* and *l-d* may be struck upwards or downwards, when joined to a long sign; thus,  or  *failed*, but otherwise, only downwards. The heavy line is more easily struck downwards. Half length signs must be struck in the same direction as the full length ones, to which the addition of *t* or *d* is made.

137. The upstroke *r* is halved for *r-t*; thus,  in the word *part*; and halved and made heavy for *r-d*; thus,  in *afford*. The downward *r-d* is, however, generally better, as  in *board*;  in *cheered*;  is *lr-t*. (166.)

138. The treble consonants of the *plt* (or *pld*), *prd*, and *pnd*-series, should be named in analysing words like the corresponding double consonants, with the addition of *t* or *d*, as in *peopled* (*pld*), *papered* (*prd*), *burdened* (*dnd*). (105, 107, 124.) Those of the *p-shnt* series are named by adding the last syllable of *patient*, to the several sounds, *p*, *b*, *t*, *d*, &c.; thus, *p-shnt*, or with the *d* sound, as *m-shnd*, in the word *motioned*. The contractions, *sprt*, *sprd*, *strt*, *pnts*, *dnts*, &c., may be called *spurt*, *spurd*, *sturt*, *puhnts*, *duhnts*, &c.

139. The two consonants, represented by the simple half length signs, *p-t*, *b-d*, &c., are named together in analysing words, when no distinct vowel comes between them, by a single impulse of the voice, and with as little of the natural vowel sounds between them as possible.

All the monosyllabic names of the several clusters of consonant-sounds may also be used to denote the contracted signs by which they are written; thus, in directing a pupil to write 'pale,' a teacher would say, 'make *p*, *l* \swarrow and place *a* after the *p*' (giving the *sound* only, not the names of the consonants); and, for 'play,' he would say, 'make *pl* \nwarrow (uttered by one impulse), and place *a* after it.'

HALF LENGTH SIGNS USED AS WORD-SIGNS.

140. The half length signs, occupying only half the space of a line, are used for one word above the line, and for another upon it, in the same manner as the horizontals (68), as follows, \swarrow after; \wedge *immediate-ly* (68); \nearrow establish-ment; \nwarrow word; \wedge not; \swarrow represent; \nwarrow under; \wedge ob-ject; \wedge subject; \wedge God; \wedge good; \nwarrow particular; \nwarrow opportunity; \nearrow short; \wedge cannot; \nearrow ac-count; \nwarrow spirit.

CHAPTER XVII.

OF THE METHOD OF PLACING THE VOWEL-SIGNS
TO CONSONANT-SIGNS HAVING FINAL ADDI-
TIONS OR CHANGES.

141. By final additions and changes spoken of in this chapter, are meant the *n*-hook, and *shn*-hook, and *the halving of the consonant-signs*. This last may be regarded as the cutting off of the last half of the sign, and, therefore, as a *final change* with respect to it, the effect of which is to denote the *addition* of another consonant-sound, to that of the full length sign. (130.)

142. The following are the rules for vocalizing the consonant-signs, having final additions or changes.

I. If the vowel is to read before all the consonants, place the vowel-sign *before*, that is, *on the left-hand side of*, (35) or *above*, (40) the consonant-sign, in the same manner as if there *were no* final addition or change; thus, v *open*; v *opened*; v^{v} *heighten*; v^{v} *heightened*; v^{v} *option*; v^{v} *action*; v^{v} *often*; v^{v} *east*; v^{v} *aimed*; v^{v} *wished*; v^{v} *whipped*.

II. If the vowel is to be read *between* the two consonants, place the vowel-sign *after*, that is, on

the right hand side of, or below the consonant-sign ; thus, \backslash *pain* ; \backslash *vines* ; \curvearrowleft *man* ; \curvearrowleft *lean* ; \curvearrowleft *vision* ; \curvearrowleft *mate* ; \curvearrowleft *light* ; \curvearrowleft *quite* ; \curvearrowleft *fates* ; \curvearrowleft *patient*. Two vowels may be written to read *between*, by placing the sign for the last one a little off; thus, \backslash^{\cdot} *diet*. The third-place vowel-sign may be placed within the *shn*-hook; thus, \backslash *fashions*. In all these cases the added consonants separate, and are read after the vowel, in the same manner as the circle *s* or *z* and the general rules for placing the vowel-signs are, in the same manner, sacrificed for the sake of brevity. (76).

III. If a vowel is to follow both consonant-sounds, that is, if it is to come *after* the sound, which would be represented by the final hook or halving, and *if this vowel is to end the word*, the final hook, or halving, must not be used, as there is, in this case, no place for the vowel-sign to occupy. The added consonant-sound, that is the *n*, *t*, or *d*, must be written in full; thus $\backslash\cdot$ *penny* ; $\backslash\cdot$ *beauties*. The termination *shn*, would be written in full, thus, $\curvearrowleft\cdot$ or \curvearrowleft but, as it is never followed by a final vowel, the contracted forms may be always used thus, \curvearrowleft or \curvearrowleft (122,) or else the simple hook.

When still another consonant is to follow, the contracted form may in all cases be retained,

and the vowel-sign placed to the following consonant sign; thus, V^{\vee} *funnel*; V^{\vee} *better*; V^{\vee} *writer*; V^{\vee} *matters*; G^{\vee} *nationally*.

143. In all cases, a hook or circle, or a hook and circle at the *beginning* of a consonant-sign, having a final hook or halving, will be read precisely as it would be if there *were no* final hook or halving; the writer will therefore write accordingly, thus, S^{\vee} *plan*, S^{\vee} *planned*; S° *season*, S° *seasoned*; S^{\vee} *sober*, S^{\vee} *sobered*; F^{\vee} *fable*, F^{\vee} *fabled*; M° *measure*, M° *measured*; W^{\vee} *wager*, W^{\vee} *wagered*; S° *seem*, S° *seemed*; S^{\vee} *save*, S^{\vee} *saved*; H^{\vee} *humor*, H^{\vee} *humored*.

CHAPTER XVIII.

OF THE LOOPS *ST* AND *STR*.

144. There is a second form for the common combination *st*, (beside the *s*-sign half length,) which is a loop or oval joined to a long consonant-sign. It is made half the length of the long sign to which it is joined. A larger loop, made two thirds the length of the long sign, is used for *str*.

The several sounds represented by these loops are to be read as *one*, and the loops, joined at either end of the consonant-signs, are then used, in all respects, at the beginning and end of words, as the circle *s*; thus, \textcircled{P} *less*, \textcircled{P} *lest*, \textcircled{P} *Lester*; \textcircled{P} *Miss*, \textcircled{P} *mist*, \textcircled{P} *Mister*; \textcircled{P} *seam*, \textcircled{P} *steam*, \textcircled{P} *stream*. They should not, however, be made within a hook, as \textcircled{P} for *stable*, which should be written \textcircled{P} .

145. An *s* or *z* may be added to the loops, by continuing a stroke to the other side, and forming a circle; thus, \textcircled{P} *tests*; \textcircled{P} *crusts*; \textcircled{P} *spinsters*. A vowel-sign may be put inside of the large loop; thus, \textcircled{P} *faster*.

146. The small loop, reduced in size, may be added to the half length signs; thus, \textcircled{P} *stated*.

Both loops may be occasionally used in the middle of a word; thus,  *distinct*;  *disturb*.

147. When a word begins with a vowel, followed by *st* or *zd*, the half length strokes must be used thus,  *Easter*;  *wisdom*.

The two forms of *s* may be distinguished, as 'the stroke *s*,' and 'the circle *s*,' and the two forms of *st*, as the stroke *est*, and the loop *est*, (expelling the vowel entirely when analysing words.) So we may also speak of the stroke *stur*, and the loop *stur*.

The *st* loop is used as a word-sign for the word *first*, placed on the line and inclined to the right, thus, 

CHAPTER XIX.

SPECIAL SCHEME OF VOWEL-SIGNS.

148. It was laid down as the rule, in treating of the *l* and *r*-hook series of signs, that those signs cannot be used when a vowel comes *between the two consonant sounds* which they represent; and that the *l* or *r* must in that case be represented *by its own proper sign*, or else the vowel-sign must be omitted. (105.) This rule is without exception when the regular method of writing the vowel-signs is employed. The following peculiar mode of representing the vowels, has, however, been provided, by which they may be written so as to read between the sound of the alphabetic-sign and that of the *l* or *r* added by the hook.*

149. The simple vowel-sign of the first group is a small circle (half the size of the *s* circle) written for the *full vowels*, precisely where the dot or other ordinary vowel-sign would be written to read, *after*; and, for the *stopped vowels*, precisely where the ordinary vowel-sign would be written to read *before* the double

* This method is extremely useful in restoring the reporting style, in which the vowels are chiefly omitted, to the fuller style of writing. Beginners are recommended not to attempt to practise it, until they are entirely familiar with the common mode of writing the vowels.

consonant; thus, compare, \nwarrow *plea*, and \nwarrow *peal*; \nwarrow *play*, and \nwarrow *pail*; \nwarrow *grass*, and \nwarrow *cars*; and, in the same manner, compare, \nwarrow *able*, and \nwarrow *bell*; \nwarrow *hammer*, and \nwarrow *marry*, &c.

The third-place circle, for the full vowel, may be put before a following consonant; thus, \nwarrow *Charles*, \nwarrow *Parliament*.

150. The second group of the *simple*, and all of the *compound* vowel-signs, are the same in this as in the common method of vocalizing, but they are written differently; thus, I. They are struck through the double consonant-sign; as, \nwarrow *purse*; \nwarrow *full*; \nwarrow *quail*. II. The dash for the sixth vowel *o*, is written in a slanting direction; as \nwarrow *pour*; \nwarrow *coal*. III. When it is inconvenient to strike the vowel-sign through a consonant-sign, on account of interfering with a hook or circle, it may be placed at the beginning or end of the consonant-sign; as \nwarrow *cord*; \nwarrow *toil*; \nwarrow *secures*; \nwarrow *regulation*. This can only be done, however, at the beginning or end of a word. If the difficulty occurs in the middle of a word, it is better to write the consonants by their full signs.

151. The *l* and *r*-hook-signs may also be halved when vocalized in this manner for the addition of *t* and *d*; thus \nwarrow *fault*; \nwarrow *tilt*; \nwarrow *board*.

CHAPTER XX.

OF THE PREFIXES AND AFFIXES.

152. Besides the prefixes and affixes already noticed, (65) the following are extremely useful. They should be written near the body of the word but not joined.

PREFIXES.

For *accom*, write a heavy dot; as,  *accomplished*;  *accompany*.

For *incom*, *incon*, *incog*, write  above the line; as,  *incomplete*;  *inconstant*.

For *recom*, *recon*, *recog*, write  as  *recommend*;  *recognise*.

For *uncon*, *uncom*, *incog*, write  on the line; as,  *unconcerned*;  *uncommon*.

For *circum*, write  at the beginning of the next consonant; as  *circumscribe*;  *circumstance*.

For *inter*, and *intro*, write  in any position near the following letter; as  *interview*;  *introduction*.

For *magna*, *magni*, write  above the body of the word; as  *magnanimous*;  *magnify*.

For *self* write o at the side of the next consonant; as  *selfish*. Write this circle twice the size of the vowel circle. (149.)

AFFIXES.

For *ly*, write  as  *finely*;  *patiently*; or else in full, as  *namely*, when the l can be more conveniently joined, which generally is the case, except after a final hook. The vowel may then be added or not, at pleasure.

For *self*, write o; as  *thyself*;  *myself*;  or  *himself*.

For *selves*, write a large circle, as,  *yourselves*;  *themselves*.

NOTE.—After *p*, *b*, and the downward *l*, it will be found more convenient to join the consonant *ng*, than to take off the pen and make the dot for the termination *ing*; thus,  *spring*,  or without the vowels  *being*.

CHAPTER XXI

OBSERVATIONS ON DIFFERENT MODES OF WRITING.

PARTICULAR RULES FOR CORRECT WRITING.

153. Phonography affords a great variety in the forms of words. In some instances the selection is directed by principles which ought not to be neglected; and in others the taste alone needs to be consulted. The learner insensibly acquires the most facile and rapidly written forms by practice in writing. An acute angle is more easily made than an obtuse one; thus,  is preferable to . A full form, which can be made without raising the pen, is often preferable to a more contracted one, which requires the pen to be raised; thus,  is better than  for *sensible*;  than  for *impossible*, &c. It is always better for the hand to proceed forward than to go backward; thus,  should be preferred to  for *simple*; and  to  for *several*, &c. The most contracted is not always the easiest form. Select those forms which can be readily vocalized.

154. It results from the rule for combining consonant-signs, (p. 48) that a straight-line-sign

is repeated by making it twice the length of a single sign; thus, — *kick*; but a half length consonant-sign must not be joined to a full one, in this or any other case, where it will not form an angle; thus, we must write, — not — for *correct*; and —; not — for *fact*. This difficulty does not occur when a curve-sign is repeated; thus, — *main*, — *maimed*.

PECULIAR AND EXCEPTIONAL MODES OF WRITING.

155. After a half-sized consonant or a final hook, circle, or loop, the first full vowel *e*, when terminating a word, may be written by a full-sized dot at the end, as —. *pretty*; —. *funny*; —. *fancy*.

The word *any* should be written *above* the line, although its accented vowel is No. 2, in order that, when the vowels are omitted, it may not be mistaken for *no*, a word of opposite meaning, represented by *n* on the line. *Men* and *man* may be distinguished, thus, — —

156. To express the vowel, No. 2, between *s-s*, when the large circle is used, a dot must be made in the centre; thus, —. The other simple vowels are of very rare occurrence between *s-s*. A diphthong-sign may occasionally be inserted in the large circle; as — *pre-*

cisely;  *persuasive*. Here there can be no distinction made between *we*, *wa*, *wah*, &c.

158. A *hook* made by continuing the *s* or the *ns* circle, and the *st* and *str*, or the *nst* and *nstr* loops to the other side of the consonant-sign, adds the syllable *shn*, as  *position*;  *persuasion*;  *superstition*;  *ministration*;  *compensation*;  *transition*. In this case the hook, *shn*, may be vocalised, for a first or second-place vowel only, by writing the vowel at the *left*, or *above*, for a *first*; and at the *right*, or *below*, for a second-place vowel, as in some of the examples above.

159. The circle *s* may be added to this hook, which must then be made conspicuous; as,  *positions*;  *physicians*;  *superstitions*;  *illustrations*.

LICENCES IN WRITING.

160. The vowel-signs may gradually be left out by the learner, in private writing and reporting, as he acquires facility in reading, until they will hardly be used at all. They may be inserted afterwards, if necessary, to restore the writing to a fuller style. In correspondence, book-keeping, &c., they should be mostly inserted, except the fifth or natural vowel, when not

initial, aspirated, nor accented, in which case it may be omitted before *l, r, m*, and *n*, without any danger of ambiguity; thus, *manual*; *eater*; *blossom*; *lesson*; *learn*; *learned*; (the past tense of the verb *to learn*.) When this vowel is initial, as in *amaze*; or is aspirated, as in *her*; or accented, as in *preserve*; or followed by any other consonant than *l, r, m, n*, as *capable*, learners will find it best to insert it regularly.

When *z* occurs in the middle or at the end of a word, it may be written by a *light* circle, as if it were an *s*, because it is somewhat troublesome to make the *heavy* circle; thus, instead of for *amazed*; and instead of for *tease*. Sometimes the thickening of the circle is necessary at the end of a word, to prevent ambiguity, as in the phrases, *the laws of a kingdom*; and the *the loss of a kingdom*; or the *heavy* stroke, *z*, may be written when there is any danger of such confusion. The same observations may be extended to the loop for *zd*, which may be made like the light loop, *st*, or the full signs written instead.

161. A final *e* may be expressed by placing the *heavy* dot at the end of the word; thus, *faculty*; *agency*. The plural may then be made by the small circle instead of the dot;

as \textcircled{u} . *faculties*, except it is more convenient to use the double circle; thus, \textcircled{u} rather than $\textcircled{u}\textcircled{u}$ *agencies*.

162. It is allowable to use a prefix or affix, that is similar in sound, to those given in the list (152), as, \textcircled{u} *enterprise* \textcircled{u} *incumbent*.

163. A word-sign may be used as a prefix or affix; thus \textcircled{u} - *advantageous*; \textcircled{u} *hereafter*. In the useful words, *understanding*, *understood*, the *nd* signifying *under*, may, for convenience, be joined; as \textcircled{u} *understand*; \textcircled{u} *understood* (144). The *n* and *ng* signs may be joined thus, \textcircled{u} for *anything*.

164. The skeletons \textcircled{u} \textcircled{u} will always be recognised, as *also* and *always*, because no other words have the same skeletons. The same may be said of many other consonant outlines of words.

165. The advanced writer may halve the length of the *light* consonant-signs, (abrupts and semi-vowels,) for the addition of *d*, as well as *t*, and of the *heavy* ones for *t*, as well as *d*; thus, he will use \textcircled{u} for *plate*, and *played*; \textcircled{u} for *bite*, and *bide*, &c., depending on the context to determine which word is meant.

166. The following are word-signs in which this licence is admitted; \textcircled{u} *told*; \textcircled{u} *toward*; \textcircled{u} *Lord*; \textcircled{u} *according*; \textcircled{u} *great*; \textcircled{u} *without*; \textcircled{u} *that*.

The double vowel-sign for the diphthong *o e*, taken from the complete Alphabet of Nature, by Mr. Ellis, may be used in such English words as o *owing*.

CHAPTER XXII.

ALPHABETICAL LIST OF THE WORD-SIGNS.

— According- <i>ly</i> .	follow.
— account.	for.
— <i>ac</i> -knowledge.	from.
✓ advantage.	✓ General- <i>ly</i> .
✓ after.	✓ gentleman- <i>men</i> .
✓ all, awe.	✓ give- <i>n</i> .
✓ alone.	— God.
✓ already.	— good.
— an.	— great, grate.
— and.	✓ Have.
— are.	— him, hymn.
— as.	— how.
✓ Be, bee.	^ Immediate- <i>ly</i> .
✓ been, bin.	✓ important- <i>ce</i> .
✓ but, butt.	✓ improve- <i>ment</i> .
— Can.	✓ in, inn.
— cannot.	✓ individual.
— come.	° is.
— Do.	— it.
— done, dun.	✓ Language.
— Every.	✓ lord.
— establish- <i>ment</i> .	— May.
— First.	— me.

more.	That.
No, know.	the, thee.
nor.	their, there.
not, knot.	them.
Object.	thing.
objection.	think.
occasion.	to, two, too.
of.	together.
on.	told.
only.	toward.
opinion.	truth.
opportunity.	Up.
or.	upon.
Particular.	under.
phonography-ic.	usual.
pleasure.	Very.
principle-al.	Was.
public.	were, way, weigh.
Remark.	what.
re-member.	which.
represent.	who.
Shall.	will.
short.	with.
should.	without.
so, sew, sow.	word.
spirit.	would, wood.
subject.	Your, you, yew, ewe.

These are the word-signs, to the number of one hundred, used in common writing. In the reporting style many others are admitted, but they should not be learned by a beginner.

167. The word-signs for *cannot*, *objection*, *remark*, and *without*, are placed above the line for particular reasons, though they have a second or third-place vowel in the accented syllable.

168. When a word-sign represents a verb in the present tense, the past tense, if formed regularly by the addition of *t* or *d*, may be represented by the same sign ; as *represent*, and *represented*. The context will determine the time of the action ; if necessary, however, a *t* or *d* may be added for the past tense ; thus, *re* *represented*.

169. The same word-sign may be used for the *adjective* and *adverb*, when the latter is derived from the former, by affixing *ly* ; thus, *general*, and *generally*.

170. The plural of a word-sign may be written by merely adding the circle *s* ; thus, *- good*, *- goods*.

171. The *shn*-hook may be added to the word-sign, *bl* (public), to represent *publication*. The plural of *hand* must be *ڻ* or *ڻ* (71.)

CHAPTER XXIII.

PHRASEOGRAPHY.

171. To promote expedition in writing, the advanced phonographer may join two or more words together, and thus, sometimes, express a phrase without removing the pen. The following examples will show how other useful combinations may be formed on the same principle, which is to express the leading consonants of those words which most frequently occur together:—

are not.	have been done.
as far.	have been made.
as far as.	I am.
as good as.	I am not.
as great as.	I do.
as soon as.	I have.
as soon as possible.	I have been.
as well as.	I have done.
at the same time.	I have had.
could be.	I have not.
could not.	if it.
could not be.	if it had not.
for instance.	it is.

it is but.	there are.
it is not.	there are not.
it is said.	this is.
it would.	to be.
it would be.	to do.
may be.	to have.
must be.	we are.
must have.	we were.
must not.	with which it is.
must not be.	with which it
ought to be.	is not.
should be.	which it may.
should do.	which it would
should have.	have been.
should not.	you are.
that is.	you will.

OBSERVATIONS ON THE PRECEDING PHRASES.

172. (*Have been made.*) The hook of *been* and *done* may be omitted, when it is inconvenient to write it; but, as a general rule, it is better to make it, in order to distinguish *been* from *be*, and *done* from *do* and *had*.

173. (I.) In attaching *I* to any word, write either the first stroke of the Phonograph downwards, or the second stroke upwards. A dis-

tinction will thus be made between *I am*, and *which it may*.

174. *Now* may be contracted to ‿ and ‿, which forms admit of the remaining part of the vowel being added. It is only for the sake of cherishing reporting habits, that this mode of writing the words is recommended, because, in the ordinary style, ‿ ‿ might easily be written ; but in reporting, when the vowels are omitted, ‿ would stand for ‿ ‿ ‿ and it becomes important to have some means of readily distinguishing them ; hence, we write ‿ ‿ ‿ and, in order to cultivate reporting habits in common Phonography, we admit these forms in the ordinary style, seeing they can be filled up thus, ‿ ‿ ‿. Indeed, most of the phrases here given may be vocalised ; thus, *C^o as well as* ; *I I do* ; *to not must be*, &c.

175. In uniting a vowel word-sign to a consonant-sign, the consonant-sign must be placed in the situation of the vowel. See *I do* and *should do*. *I may*, and *I may not*, will therefore have the same outline, and be in the same position as *I am*, and *I am not*. This cannot be avoided, for, if the vowel-sign were brought down to the line, thus, ‿ for one of these phrases, in order to distinguish it from the other, it would usurp the place of the phrases, *but may*, and *but me*. *I*

may, and *I may not*, may be written in the same way as *I am*, and *I am not*, and the vowel added in the former case; the latter being the more useful phrases, may be allowed to be written *without* the vowel. When two consonant word-signs are joined, let the first determine the position; thus,  *can be*;  *cannot be*.

CHAPTER XXIV.

STOPS, &c.

176. Stops may be written in the usual way, except the period, for which write a small cross, (×). The following notes of affection will be useful : — ? ? Interrogation ; as, ? How are you ? ! Exclamation, (! might be mistaken for *doing*.) ≈ Laughter. ! Grief. The notes of interrogation and exclamation are placed both at the beginning and end of the phrase — the note of interrogation being reversed at the beginning. The accent is indicated by a short fine line, close to the vowel, and parallel to the consonant ; it may be struck through those vowels which are written at right angles to the consonant ; thus,  *experience* ;  *balloon* ;  *queenly*. Mark emphatic words and phrases as in long hand manuscript, by drawing one, two, or more lines underneath ; a single line under a single word must be made wave-like, to prevent its being mistaken for the consonant *k*. Write Arabic numerals as usual, or express the words in phonography ; this latter method is always best for *one* and *two*.

A capital letter is indicated by two short lines under the beginning of the word ; as '  meaning, The 'Times' Newspaper.

CHAPTER XXV.

OF THE NAMES AND ORDER OF THE SIGNS OR LETTERS
IN THE FULL VOWEL AND CONSONANT ALPHABET.

177. The order of the vowels is fully shown in chapter II. (42.) The names of the full vowel-signs are always the same as the sounds of the full *vowels*. For the stopped vowels, as they are extremely short, and too abrupt for conversation, it is found convenient to substitute *names*, formed by uttering the consonant *t* after the vowels; thus *it*, *et*, *at*, *ot*, *ut*, *ööt*. These names should not be used in analysing words, but only when these vowels stand unconnected, as the initials of proper names, &c.

The three proper diphthongs, *i*, *oi*, *ou*, and the very common improper diphthong *u* (*in union*), are represented, in phonotypic printing, by single letters. (See appendix.)

The consonants are so arranged, that it is equally a scientific order, whether we utter them as the signs follow each other, taken in the horizontal or the perpendicular columns of the alphabet table, chapter I. (30.) If we proceed horizontally, we take the light and heavy signs together; thus *p*, *b*; *t*, *d*, &c.

Proceeding perpendicularly, we have *p*, *b*, *f*, *v*, *m*, &c. The names adopted for the consonant-signs, to be used by printers, and in conversation, &c., but not in analysing words, arranged in this order, are, *pe*, *be*, *ef*, *va*, *am*, *wa*, *te*, *de*, *ith*, *the*, *es*, *za*, *el*, *ra*, *en*, *ya*, *cha*, *ja*, *ish*, *zhe*, *ka*, *ga*, *ing*, *ha*.

As *wa*, (or *way*), and *ya*, (or *yay*) are the names of these ambigues, the signs  should be written *on the line*, as initials, for *W*. and *Y*.

These two weak consonants are distinguished by the term *coalescents*, as the third ambigue (*hay*) is by the term *breathing*. In phonotypy these three sounds have each a distinct consonant-letter. (See appendix.)

APPENDIX.

PHONOTYPIC ALPHABET.

CONSONANTS.			VOWELS.			
Type.	Example of Sound.	Name.	No.	Type.	Example of Sound.	Name.
P p	pay	pi	1	l i	feet	i
B b	bay	bi		I i	fit	it
F f	few	ef				
V v	view	ve	2	E ε	mate	ε
M m	sum	am		E e	met	et
W w	way	we	2 1/2	Æ æ	mare	æ
T t	toe	ti	3	A a	psalm	a
D d	doe	di		A a	Sam	at
Γ t	thigh	it	4	Θ e	caught	e
ð ð	thy	di		O o	cot	ot
S s	seal	es	5	U u	cür	u
Z z	zeal	ze		U u	curry	bt
L l	bail	el	6	O o	bone	o
R r	bare	re	7	UW ui	fool	ui
N n	sun	en		UW ui	full	ut
Y y	yea	ye				
ɛ ɛ	chew	ɛ				
J j	jew	je				
Σ ſ	mesh	iſ	COMPOUND VOWELS.			
ꝫ ȝ	measure	ȝi		ꝫ i	high	i
C c	call	ce		ꝫ Ȱ	hoy	Ȱ
G g	gall	ge		ꝫ ȝ	how	ȝ
ꝫ ȝ	sung	iȝ		ꝫ y	hew	y
H h	hay	hɛ				



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